

# IDK-LOK

Fittings & Valves

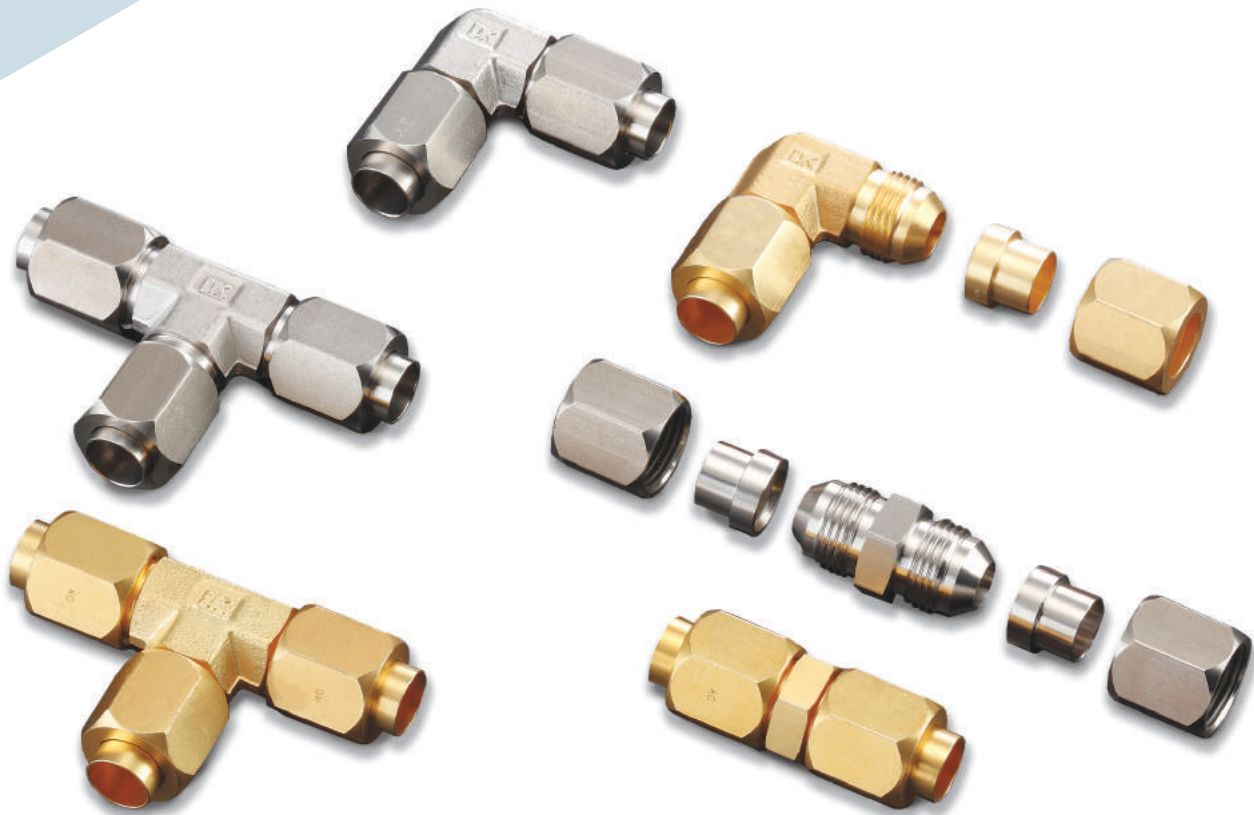
## K Series JIC Tube Fittings



































SAE J514 37° Flared

### Features

- Standard Materials: Stainless Steel, Carbon Steel and Brass.
- Universal Fittings for Inch and Metric tube.
- Fitting without sleeve and nut for connection to a female swivel on a hose assembly.

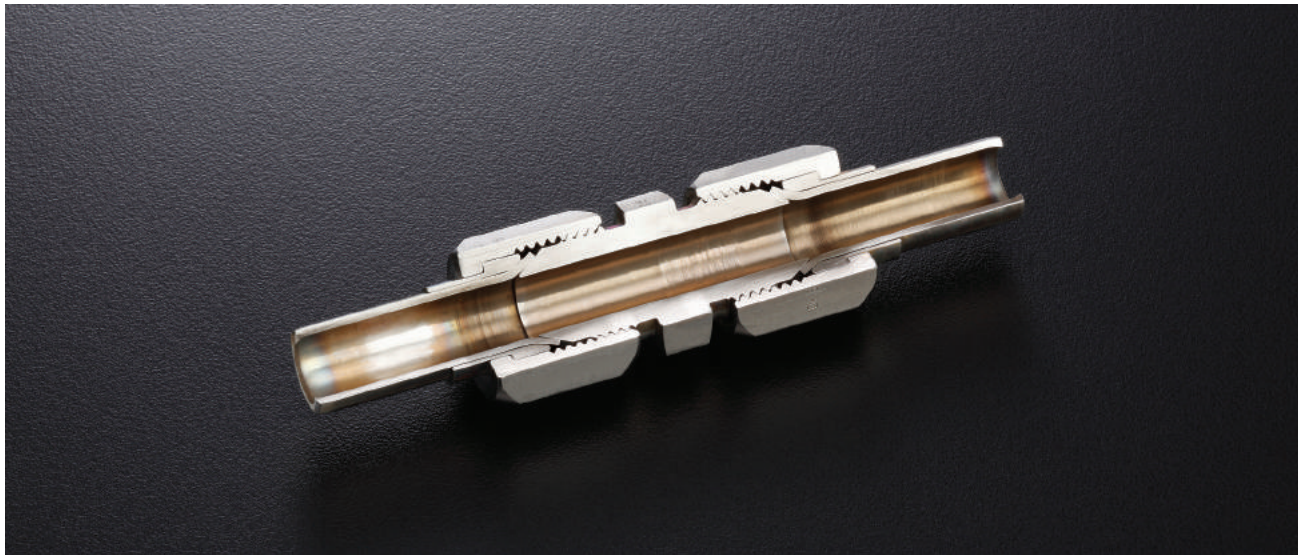
No.00-0  
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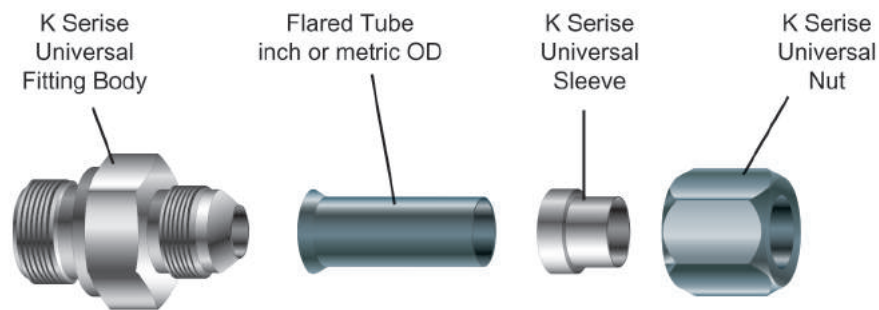
|                               |   |                                |  |    |                           |   |
|-------------------------------|---|--------------------------------|--|----|---------------------------|---|
| <b>Tube to Tube Union</b>     |   | 45° Male Elbow                 |    | 18 | <b>Swivel Fittings</b>    |   |
| Unoin                         |    | <b>KLBM</b>                    |  |    | Swivel Male Connector     |    |
| <b>KU</b>                     | 06  |                                |  |    | <b>KSMC</b>               | 30  |
| Union Elbow                   |    | <b>Tube to Female Pipe</b>     |  |    | Swivel UNF Male Connector |    |
| <b>KL</b>                     | 07  | Female Connector               |    | 19 | <b>KSMCS-U</b>            | 31  |
| Unoin Tee                     |    | <b>KCF</b>                     |  |    | Swivel Female Connector   |    |
| <b>KT</b>                     | 08  | Bulkhead Female Connector      |    | 20 | <b>KSCF</b>               | 32  |
| Unoin Cross                   |    | Female Elbow                   |    | 21 | Swivel Elbow              |    |
| <b>KX</b>                     | 09  | <b>KLF</b>                     |  |    | <b>KSL</b>                | 33  |
| Bulkhead Unoin                |   | Female Run Tee                 |  | 22 | Swivel Run Tee            |   |
| <b>KUB</b>                    | 10  | <b>KTRF</b>                    |  |    | <b>KSRT</b>               | 34  |
| Weld Bulkhead Unoin           |  | Female Branch Tee              |  | 23 | Swivel Branch Tee         |  |
| <b>KBUW</b>                   | 11  | <b>KTBF</b>                    |  |    | <b>KSBT</b>               | 35  |
| Bulkhead Unoin Elbow          |  |                                |  |    |                           |   |
| <b>KBL</b>                    | 12  | <b>Tube to Straight Thread</b> |  |    | <b>Cap and Plug</b>       |   |
| <b>Tube Port to Tube Port</b> |   | O-Seal G Male Connector        |  | 24 | Cap for Tube End          |  |
| Fitting Port Reducer          |  | <b>KMC-GO</b>                  |  |    | <b>KC</b>                 | 36  |
| <b>KPR</b>                    | 13  | O-Seal UNF Male Connector      |  | 25 | Plug for Fitting Port     |  |
| <b>Tube to Male Pipe</b>      |   | <b>KMCS-U</b>                  |  |    | <b>KP</b>                 | 36  |
| Male Connector                |  | O-Seal UNF Male Elbow          |  | 26 | <b>Spare Parts</b>        |   |
| <b>KMC</b>                    | 14  | <b>KLS-UP</b>                  |  |    | Nut                       |  |
| Male Elbow                    |  | O-Seal 45° UNF Male Elbow      |  | 27 | <b>KN</b>                 | 37  |
| <b>KLM</b>                    | 15  | <b>KLBS-UP</b>                 |  |    | Sleeve                    |  |
| Male Run Tee                  |  | O-Seal UNF Branch Tee          |  | 28 | <b>KP</b>                 | 37  |
| <b>KTRM</b>                   | 16  | <b>KTBS-UP</b>                 |  |    | Bulkhead Lok Nut          |  |
| Male Branch Tee               |  | O-Seal UNF Run Tee             |  | 29 | <b>KBN</b>                | 38  |
| <b>KTBM</b>                   | 17  | <b>KTRS-UP</b>                 |  |    |                           |   |

**Design**

DK-Lok K Series JIC Tube Fitting consists of body, sleeve and nut and meets the requirements of SAE J514 and ISO 8434-2 standards.

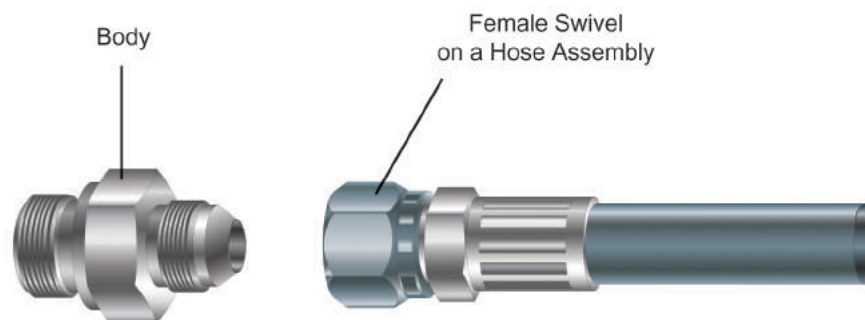


DK-Lok K Series JIC Tube Fitting are capable of connecting to inch and metric tube with no changing the Sleeve and Nut.

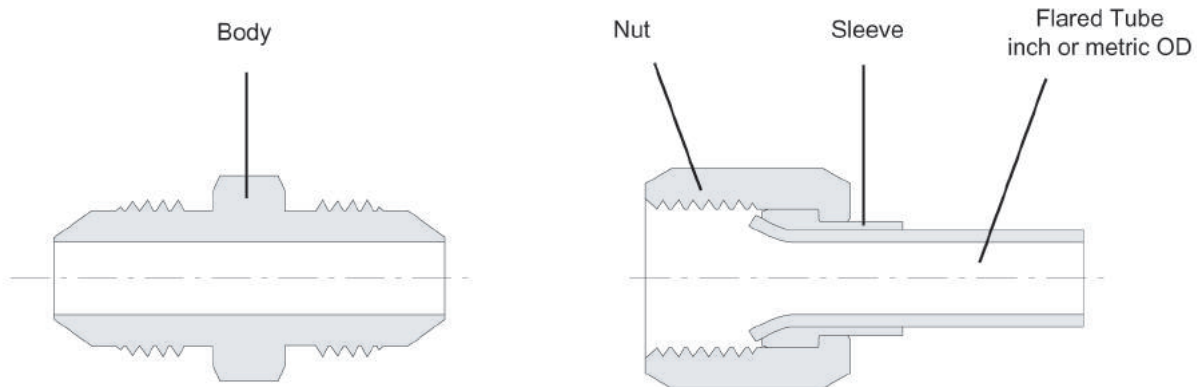


Example : KU-4T-SA fitting capable of connecting to 1/4" OD Stainless steel tubing.

The fitting body without sleeve and nut is widely used as a hose adapter for connection to a female swivel on a hose assembly.



**Technical Information**



**Table 1. Material Standards**

| Fitting Materials   | Body  |  | Nut and Sleeve  | Flared Tubing (Not supplied)          |
|---------------------|---|--|---|---------------------------------------|
|                     | Bar Stock                                     | Forging                                      |   |                                       |
| Stainless Steel 316 | ASTM A276/A479<br>Type 316/316L               | ASTM A182 F316/F316L                         | ASTM A276/A479<br>Type 316/316L<br>Nut supplied with inside Molybdenum coated.        | ASTM A269<br>ASTM A213                |
| Carbon Steel        | ASTM A108<br>JIS G4051 S20C - S48C            | ASTM A105<br>JIS G4051 S20C - S48C           | ASTM A108<br>JIS G4051 S20C - S48C<br>Nut supplied with inside Molybdenum coated.     | ASTM A179<br>ASTM A161                |
| Brass               | ASTM B453 UNS C35300<br>JIS H3250 Alloy C3604 | ASTM B283 UNS 37700<br>JIS G4051 Alloy C3771 | ASTM B453 UNS C35300<br>JIS H3250 Alloy C3604<br>Nut supplied with inside lubricated. | Copper Tubing<br>ASTM B88<br>ASTM B75 |

**Table 2. Working Pressure Rating**

For fitting materials of Stainless steel and Carbon steel.

| SAE Nominal Size | Tube OD |        | Union and Bulkheads |     | Fitting with Female Swival |     | Fitting with Pipe Thread |     |
|------------------|---------|--------|---------------------|-----|----------------------------|-----|--------------------------|-----|
|                  | inch    | mm     | psi                 | bar | psi                        | bar | psi                      | bar |
| 2                | 1/8     | 3      | 5000                | 345 | 5000                       | 345 | 5000                     | 345 |
| 3                | 3/16    | 4      | 5000                | 345 | 5000                       | 345 | 5000                     | 345 |
| 4                | 1/4     | 6      | 5000                | 345 | 4500                       | 310 | 5000                     | 345 |
| 5                | 5/16    | 8      | 5000                | 345 | 4000                       | 275 | 5000                     | 345 |
| 6                | 3/8     | 10     | 5000                | 345 | 4000                       | 275 | 4000                     | 275 |
| 8                | 1/2     | 12     | 4500                | 310 | 4000                       | 275 | 3000                     | 210 |
| 10               | 5/8     | 16     | 3500                | 240 | 3000                       | 210 | 3000                     | 210 |
| 12               | 3/4     | 18, 20 | 3500                | 240 | 3000                       | 210 | 2500                     | 170 |
| 14               | 7/8     | 22     | 3000                | 210 | 2500                       | 170 | 2500                     | 170 |
| 16               | 1       | 25     | 3000                | 210 | 2500                       | 170 | 2000                     | 140 |
| 20               | 1 1/4   | 32     | 2500                | 170 | 2000                       | 140 | 1150                     | 80  |
| 24               | 1 1/2   | 38     | 2000                | 140 | 1500                       | 105 | 1000                     | 70  |
| 32               | 2       | 50     | 1500                | 105 | 1125                       | 80  | 1000                     | 70  |

## K Series JIC Tube Fittings SAE J514 37° Flared

**Table 3. Suggested Tubing Wall Thickness**

| SAE Nominal Size | Inch Tube OD inch | Wall Thickness, inch |       | Metric Tube OD mm | Wall Thickness, mm |      |
|------------------|-------------------|----------------------|-------|-------------------|--------------------|------|
|                  |                   | Min.                 | Max.  |                   | Min.               | Max. |
| 2                | 1/8               | 0.010                | 0.035 | -                 | -                  | -    |
| 3                | 3/16              | 0.010                | 0.035 | -                 | -                  | -    |
| 4                | 1/4               | 0.020                | 0.065 | 6                 | 0.5                | 2.0  |
| 5                | 5/16              | 0.020                | 0.065 | 8                 | 0.5                | 2.0  |
| 6                | 3/8               | 0.028                | 0.065 | 10                | 0.5                | 2.0  |
| 8                | 1/2               | 0.035                | 0.083 | 12                | 1.0                | 2.0  |
| 10               | 5/8               | 0.035                | 0.095 | 16                | 1.0                | 2.5  |
| 12               | 3/4               | 0.035                | 0.109 | 18, 20            | 1.0                | 3.0  |
| 14               | 7/8               | 0.035                | 0.109 | 22                | 1.0                | 3.0  |
| 16               | 1                 | 0.035                | 0.120 | 25                | 1.0                | 3.0  |
| 20               | 1 1/4             | 0.049                | 0.120 | 32                | 1.5                | 3.0  |
| 24               | 1 1/2             | 0.049                | 0.120 | 38                | 1.5                | 3.0  |
| 32               | 2                 | 0.058                | 0.134 | 50                | 1.5                | 3.5  |

**Table 4. Fittings Surface Finish**

| Sainless Steel | Carbon Steel       | Brass   |
|----------------|--------------------|---|
| Passivation    | Yellow Zinc plated | Acid Cleaned.<br>On request, chrome plated brass fitting can be supplied. |



## Ordering Information

To order a fitting with nut and sleeve, select an applicable part number and fitting material designator.  
Example : KU-2T-S

To order a fitting with nut and sleeve factory assembled, select an applicable part number, fitting material designator and suffix A to the ordering number.  
Example : KU-2T-SA

Table 5. **Fitting Material Designator**

| Sainless Steel 316 | Carbon Steel | Brass |
|--------------------|--------------|-------|
| S                  | C            | B     |

Table 6. **Tube OD Designator**

| OD inch    | 1/16 | 1/8 | 3/16 | 1/4  | 5/16 | 3/8  | 1/2  | 5/8  | 3/4  | 7/8  | 1    | 1 1/4 | 1 1/2 | 2    |
|------------|------|-----|------|------|------|------|------|------|------|------|------|-------|-------|------|
| Designator | 1    | 2   | 3    | 4    | 5    | 6    | 8    | 10   | 12   | 14   | 16   | 20    | 24    | 36   |
| OD mm      | 4mm  | 6mm | 8mm  | 10mm | 12mm | 16mm | 18mm | 20mm | 22mm | 25mm | 25mm | 32mm  | 38mm  | 50mm |
| Designator | 4M   | 6M  | 8M   | 10M  | 12M  | 16M  | 18M  | 20M  | 22M  | 25M  | 25M  | 32M   | 38M   | 50M  |

Table 7. **Thread Symbol Designator**

| Thread          | Symbol | Standards                     |
|-----------------|--------|-------------------------------|
| Taper Thread    | N      | ASME/ANSI B1.20.1             |
|                 | R      | ISO 7-1, BS 21, JIS B 0203    |
| Parallel Thread | G      | ISO 228-1, BS 2779, JIS B0202 |
|                 | U      | ASME B1.1                     |

Table 8. **Taper Pipe Thread Designator**

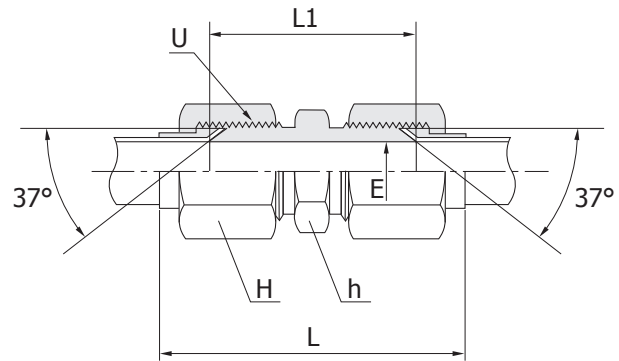
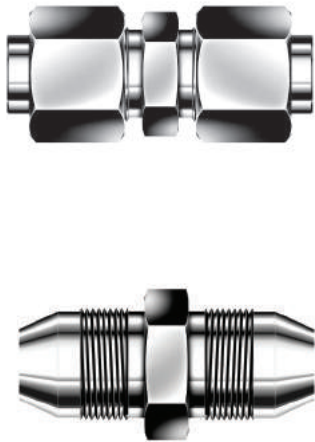
| Nominal Size | 1/8 | 1/4 | 3/8 | 1/2 | 3/4 | 1   | 1 1/4 | 1 1/2 | 2   |
|--------------|-----|-----|-----|-----|-----|-----|-------|-------|-----|
| N            | 01N | 02N | 03N | 04N | 06N | 08N | 10N   | 12N   | 16N |
| R            | 01R | 02R | 03R | 04R | 06R | 08R | 10R   | 12R   | 16R |

Table 9. **ASME B1.1 Unified Thread Designator**

| Size            | 5/16 | 3/8 | 7/16 | 1/2 | 9/16 | 3/4 | 7/8 | 1 1/16 | 1 3/16 | 1 5/16 | 1 5/8 | 1 7/8 | 2 1/2 |
|-----------------|------|-----|------|-----|------|-----|-----|--------|--------|--------|-------|-------|-------|
| Size Designator | 02   | 03  | 04   | 05  | 06   | 08  | 10  | 12     | 14     | 16     | 20    | 24    | 32    |

## K Series JIC Tube Fittings SAE J514 37° Flared

Union  
**KU**

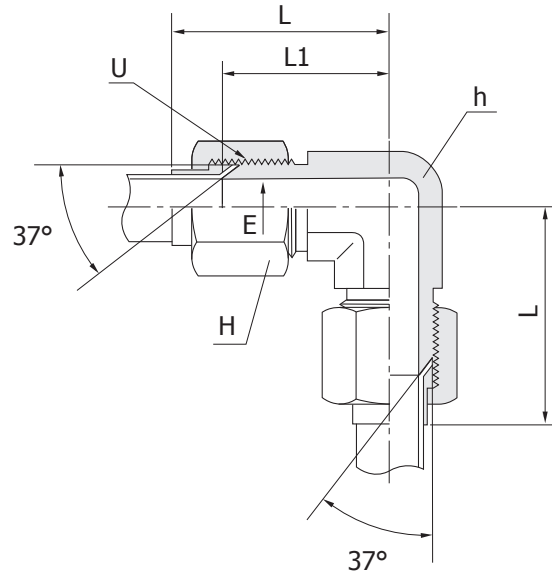


### Tube to Tube Union

| Part No. | Tube O.D |        | U<br>(UNF) | E    | L     | L1   | h<br>(HEX) | H<br>(HEX) |
|----------|----------|--------|------------|------|-------|------|------------|------------|
|          | Inch     | Metric |            |      |       |      |            |            |
| KU-2T    | 1/8"     | 3      | 5/16"-24   | 1.6  | 45.3  | 29.7 | 11.0       | 9.5        |
| KU-3T    | 3/16"    | 4      | 3/8"-24    | 3.2  | 50.0  | 31.2 | 11.0       | 11.0       |
| KU-4T    | 1/4"     | 6      | 7/16"-20   | 4.4  | 53.0  | 34.8 | 12.0       | 14.2       |
| KU-5T    | 5/16"    | 8      | 1/2"-20    | 6.0  | 55.6  | 34.8 | 14.2       | 15.8       |
| KU-6T    | 3/8"     | 10     | 9/16"-18   | 7.5  | 59.6  | 35.8 | 16.0       | 17.4       |
| KU-8T    | 1/2"     | 12     | 3/4"-16    | 9.9  | 66.5  | 41.1 | 21.0       | 22.2       |
| KU-10T   | 5/8"     | 16     | 7/8"-14    | 12.3 | 81.0  | 47.8 | 23.8       | 25.4       |
| KU-12T   | 3/4"     | 18, 20 | 1 1/16"-12 | 15.5 | 85.9  | 54.9 | 29.0       | 31.7       |
| KU-14T   | 7/8"     | 22     | 1 3/16"-12 | 18.0 | 91.3  | 56.1 | 32.0       | 34.9       |
| KU-16T   | 1"       | 25     | 1 5/16"-12 | 21.5 | 95.2  | 57.2 | 36.0       | 38.1       |
| KU-20T   | 1-1/4"   | 32     | 1 5/8"-12  | 27.5 | 98.7  | 61.7 | 46.0       | 50.8       |
| KU-24T   | 1-1/2"   | 38     | 1 7/8"-12  | 33.0 | 123.2 | 69.8 | 50.0       | 57.1       |
| KU-32T   | 2"       | 50     | 2 1/2"-12  | 45.0 | 141.4 | 86.4 | 66.7       | 73.0       |

Union Elbow

**KL**



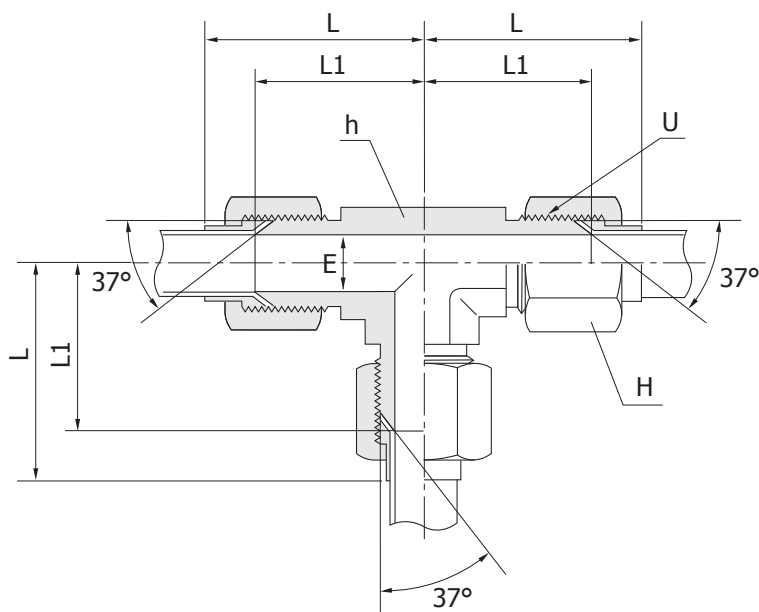
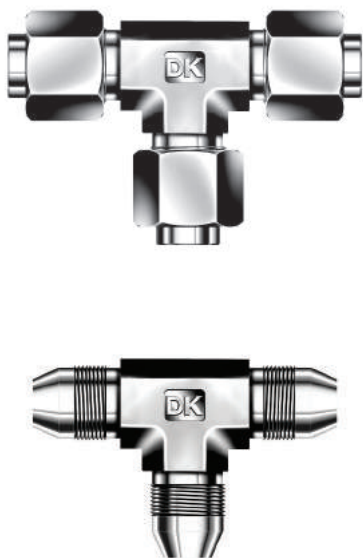
**Tube to Tube Union**

| Part No. | Tube O.D |        | U<br>(UNF) | E    | L     | L1   | h<br>(HEX) | H<br>(HEX) |
|----------|----------|--------|------------|------|-------|------|------------|------------|
|          | Inch     | Metric |            |      |       |      |            |            |
| KL-2T    | 1/8"     | 3      | 5/16"-24   | 1.6  | 27.4  | 19.6 | 11.1       | 9.5        |
| KL-3T    | 3/16"    | 4      | 3/8"-24    | 3.2  | 30.5  | 21.1 | 11.1       | 11.0       |
| KL-4T    | 1/4"     | 6      | 7/16"-20   | 4.4  | 31.7  | 22.6 | 11.1       | 14.2       |
| KL-5T    | 5/16"    | 8      | 1/2"-20    | 6.0  | 34.5  | 24.1 | 14.2       | 15.8       |
| KL-6T    | 3/8"     | 10     | 9/16"-18   | 7.5  | 38.8  | 26.9 | 14.2       | 17.4       |
| KL-8T    | 1/2"     | 12     | 3/4"-16    | 9.9  | 44.5  | 31.8 | 19.0       | 22.2       |
| KL-10T   | 5/8"     | 16     | 7/8"-14    | 12.3 | 53.4  | 36.8 | 22.2       | 25.4       |
| KL-12T   | 3/4"     | 18, 20 | 1 1/16"-12 | 15.5 | 57.7  | 42.2 | 27.0       | 31.7       |
| KL-14T   | 7/8"     | 22     | 1 3/16"-12 | 18.0 | 63.3  | 45.7 | 33.3       | 34.9       |
| KL-16T   | 1"       | 25     | 1 5/16"-12 | 21.5 | 65.0  | 46.0 | 33.3       | 38.1       |
| KL-20T   | 1-1/4"   | 32     | 1 5/8"-12  | 37.5 | 70.8  | 52.3 | 41.3       | 50.8       |
| KL-24T   | 1-1/2"   | 38     | 1 7/8"-12  | 33.0 | 85.9  | 59.2 | 47.6       | 57.1       |
| KL-32T   | 2"       | 50     | 2 1/2"-12  | 45.0 | 105.2 | 77.7 | 63.5       | 73.0       |



Union Tee

KT

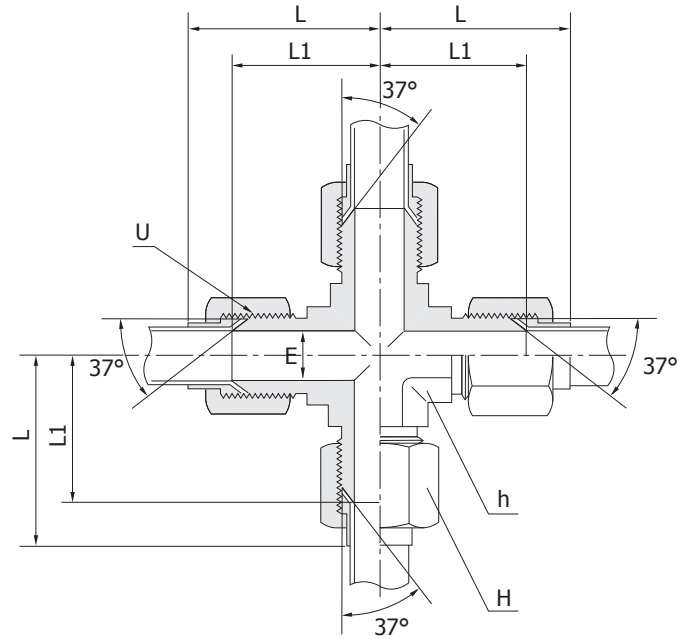


Tube to Tube Union

| Part No. | Tube O.D |        | U<br>(UNF) | E    | L     | L1   | h<br>(HEX) | H<br>(HEX) |
|----------|----------|--------|------------|------|-------|------|------------|------------|
|          | Inch     | Metric |            |      |       |      |            |            |
| KT-2T    | 1/8"     | 3      | 5/16"-24   | 1.6  | 27.4  | 19.6 | 11.1       | 9.5        |
| KT-3T    | 3/16"    | 4      | 3/8"-24    | 3.2  | 30.5  | 21.1 | 11.1       | 11.0       |
| KT-4T    | 1/4"     | 6      | 7/16"-20   | 4.4  | 31.7  | 22.6 | 11.1       | 14.2       |
| KT-5T    | 5/16"    | 8      | 1/2"-20    | 6.0  | 34.5  | 24.1 | 14.2       | 15.8       |
| KT-6T    | 3/8"     | 10     | 9/16"-18   | 7.5  | 38.8  | 26.9 | 14.2       | 17.4       |
| KT-8T    | 1/2"     | 12     | 3/4"-16    | 9.9  | 44.5  | 31.8 | 19.0       | 22.2       |
| KT-10T   | 5/8"     | 16     | 7/8"-14    | 12.3 | 53.4  | 36.8 | 22.2       | 25.4       |
| KT-12T   | 3/4"     | 18, 20 | 1 1/16"-12 | 15.5 | 57.7  | 42.2 | 27.0       | 31.7       |
| KT-14T   | 7/8"     | 22     | 1 3/16"-12 | 18.0 | 63.3  | 45.7 | 33.3       | 34.9       |
| KT-16T   | 1"       | 25     | 1 5/16"-12 | 21.5 | 65.0  | 46.0 | 34.9       | 38.1       |
| KT-20T   | 1-1/4"   | 32     | 1 5/8"-12  | 37.5 | 70.8  | 52.3 | 41.3       | 50.8       |
| KT-24T   | 1-1/2"   | 38     | 1 7/8"-12  | 33.0 | 85.9  | 59.2 | 47.6       | 57.1       |
| KT-32T   | 2"       | 50     | 2 1/2"-12  | 45.0 | 105.2 | 77.7 | 63.5       | 73.0       |

Union Cross

**KX**

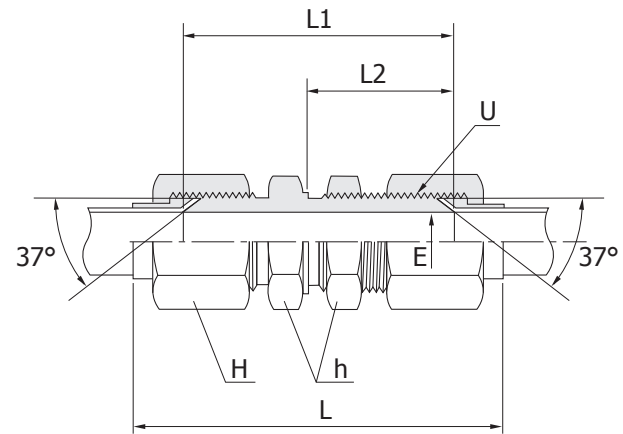
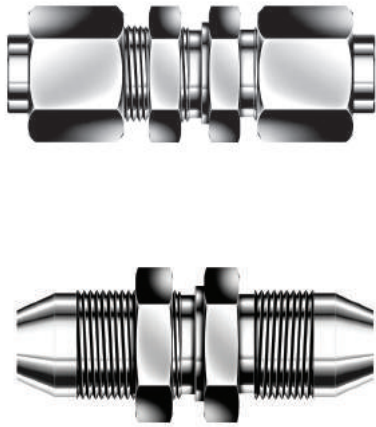


**Tube to Tube Union**

| Part No. | Tube O.D |        | U<br>(UNF) | E    | L     | L1   | h<br>(HEX) | H<br>(HEX) |
|----------|----------|--------|------------|------|-------|------|------------|------------|
|          | Inch     | Metric |            |      |       |      |            |            |
| KX-2T    | 1/8"     | 3      | 5/16"-24   | 1.6  | 27.4  | 19.6 | 11.1       | 9.5        |
| KX-3T    | 3/16"    | 4      | 3/8"-24    | 3.2  | 30.5  | 21.1 | 11.1       | 11.0       |
| KX-4T    | 1/4"     | 6      | 7/16"-20   | 4.4  | 31.7  | 22.6 | 11.1       | 14.2       |
| KX-5T    | 5/16"    | 8      | 1/2"-20    | 6.0  | 34.5  | 24.1 | 14.2       | 15.8       |
| KX-6T    | 3/8"     | 10     | 9/16"-18   | 7.5  | 38.8  | 26.9 | 14.2       | 17.4       |
| KX-8T    | 1/2"     | 12     | 3/4"-16    | 9.9  | 44.5  | 31.8 | 19.0       | 22.2       |
| KX-10T   | 5/8"     | 16     | 7/8"-14    | 12.3 | 53.4  | 36.8 | 22.2       | 25.4       |
| KX-12T   | 3/4"     | 18, 20 | 1 1/16"-12 | 15.5 | 57.7  | 42.2 | 27.0       | 31.7       |
| KX-14T   | 7/8"     | 22     | 1 3/16"-12 | 18.0 | 63.3  | 45.7 | 33.3       | 34.9       |
| KX-16T   | 1"       | 25     | 1 5/16"-12 | 21.5 | 65.0  | 46.0 | 34.9       | 38.1       |
| KX-20T   | 1-1/4"   | 32     | 1 5/8"-12  | 37.5 | 70.8  | 52.3 | 41.3       | 50.8       |
| KX-24T   | 1-1/2"   | 38     | 1 7/8"-12  | 33.0 | 85.9  | 59.2 | 47.6       | 57.1       |
| KX-32T   | 2"       | 50     | 2 1/2"-12  | 45.0 | 105.2 | 77.7 | 63.5       | 73.0       |

Bulkhead Union

**KUB**

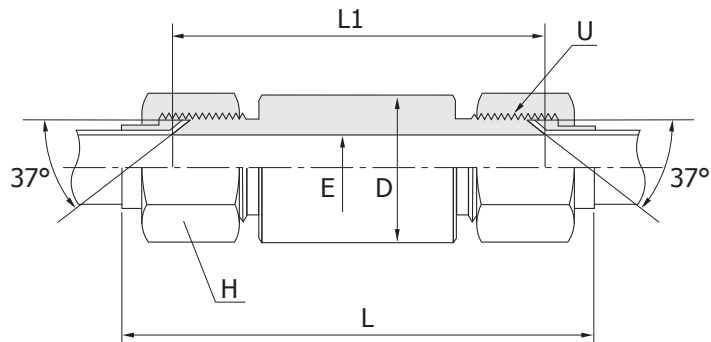
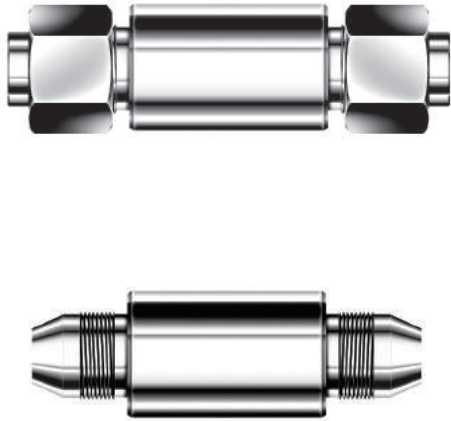


**Tube to Tube Union**

| Part No. | Tube O.D |        | U<br>(UNF) | E    | L     | L1    | L2   | h<br>(HEX) | H<br>(HEX) |
|----------|----------|--------|------------|------|-------|-------|------|------------|------------|
|          | Inch     | Metric |            |      |       |       |      |            |            |
| KUB-2T   | 1/8"     | 3      | 5/16"-24   | 1.6  | 63.1  | 47.5  | 28.2 | 14.2       | 9.5        |
| KUB-3T   | 3/16"    | 4      | 3/8"-24    | 3.2  | 67.1  | 48.3  | 28.2 | 15.8       | 11.0       |
| KUB-4T   | 1/4"     | 6      | 7/16"-20   | 4.4  | 70.8  | 52.6  | 30.5 | 17.4       | 14.2       |
| KUB-5T   | 5/16"    | 8      | 1/2"-20    | 6.0  | 73.4  | 52.6  | 30.5 | 19.0       | 15.8       |
| KUB-6T   | 3/8"     | 10     | 9/16"-18   | 7.5  | 79.2  | 55.4  | 32.5 | 20.6       | 17.4       |
| KUB-8T   | 1/2"     | 12     | 3/4"-16    | 9.9  | 87.4  | 62.0  | 36.6 | 25.4       | 22.2       |
| KUB-10T  | 5/8"     | 16     | 7/8"-14    | 12.3 | 102.8 | 69.6  | 40.1 | 28.5       | 25.4       |
| KUB-12T  | 3/4"     | 18, 20 | 1 1/16"-12 | 15.5 | 109.5 | 78.5  | 44.4 | 34.9       | 31.7       |
| KUB-14T  | 7/8"     | 22     | 1 3/16"-12 | 18.0 | 114.4 | 79.2  | 44.4 | 38.1       | 34.9       |
| KUB-16T  | 1"       | 25     | 1 5/16"-12 | 21.5 | 117.8 | 79.8  | 44.4 | 41.2       | 38.1       |
| KUB-20T  | 1-1/4"   | 32     | 1 5/8"-12  | 37.5 | 121.1 | 84.1  | 45.7 | 47.6       | 50.8       |
| KUB-24T  | 1-1/2"   | 38     | 1 7/8"-12  | 33.0 | 142.8 | 89.4  | 46.0 | 53.9       | 57.1       |
| KUB-32T  | 2"       | 50     | 2 1/2"-12  | 45.0 | 161.7 | 106.7 | 53.1 | 69.8       | 73.0       |

Weld Bulkhead Union

**KBUW**



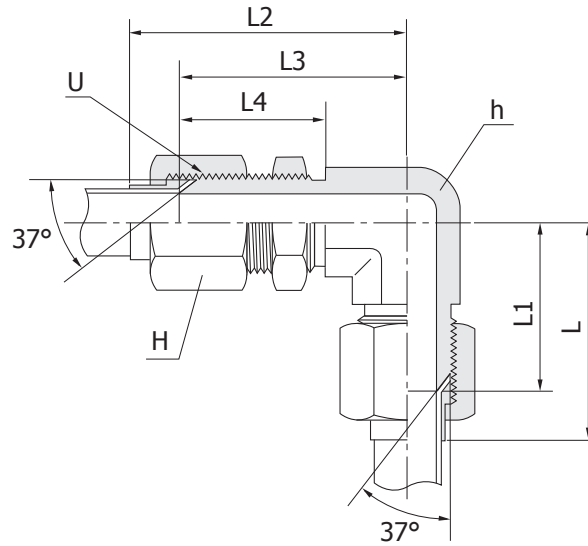
**Tube to Tube Union**

| Part No. | Tube O.D |        | U<br>(UNF) | E    | D    | L     | L1    | H<br>(HEX) |
|----------|----------|--------|------------|------|------|-------|-------|------------|
|          | Inch     | Metric |            |      |      |       |       |            |
| KBUW-2T  | 1/8"     | 3      | 5/16"-24   | 1.6  | 11.0 | 85.6  | 70.0  | 9.5        |
| KBUW-3T  | 3/16"    | 4      | 3/8"-24    | 3.2  | 11.0 | 88.8  | 70.0  | 11.0       |
| KBUW-4T  | 1/4"     | 6      | 7/16"-20   | 4.4  | 14.0 | 98.2  | 80.0  | 14.2       |
| KBUW-5T  | 5/16"    | 8      | 1/2"-20    | 6.0  | 16.0 | 120.8 | 100.0 | 15.8       |
| KBUW-6T  | 3/8"     | 10     | 9/16"-18   | 7.5  | 17.0 | 123.8 | 100.0 | 17.4       |
| KBUW-8T  | 1/2"     | 12     | 3/4"-16    | 9.9  | 22.0 | 125.4 | 100.0 | 22.2       |
| KBUW-10T | 5/8"     | 16     | 7/8"-14    | 12.3 | 25.0 | 143.2 | 110.0 | 25.4       |
| KBUW-12T | 3/4"     | 18, 20 | 1 1/16"-12 | 15.5 | 30.0 | 151.0 | 120.0 | 31.7       |
| KBUW-14T | 7/8"     | 22     | 1 3/16"-12 | 18.0 | 32.0 | 165.2 | 130.0 | 34.9       |
| KBUW-16T | 1"       | 25     | 1 5/16"-12 | 21.5 | 40.0 | 168.0 | 130.0 | 38.1       |
| KBUW-20T | 1-1/4"   | 32     | 1 5/8"-12  | 27.5 | 46.0 | 177.0 | 140.0 | 50.8       |
| KBUW-24T | 1-1/2"   | 38     | 1 7/8"-12  | 33.0 | 50.0 | 193.4 | 140.0 | 57.1       |
| KBUW-32T | 2"       | 50     | 2 1/2"-12  | 45.0 | 70.0 | 205.0 | 150.0 | 73.0       |

## K Series JIC Tube Fittings SAE J514 37° Flared

Bulkhead Union Elbow

# KBL

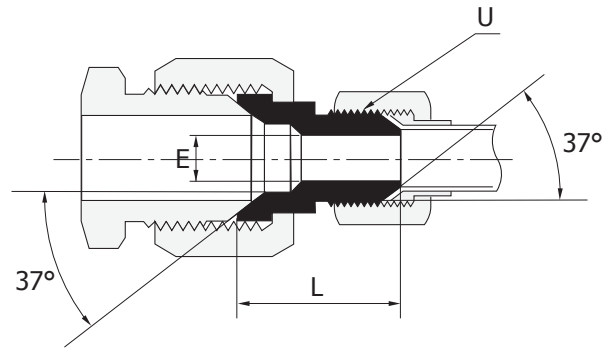
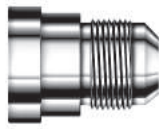


### Tube to Tube Union

| Part No. | Tube O.D |        | U<br>(UNF) | L     | L1   | L2    | L3    | L4   | h<br>(HEX) | H<br>(HEX) |
|----------|----------|--------|------------|-------|------|-------|-------|------|------------|------------|
|          | Inch     | Metric |            |       |      |       |       |      |            |            |
| KBL-2T   | 1/8"     | 3      | 5/16"-24   | 30.2  | 22.4 | 45.9  | 38.1  | 23.4 | 11.1       | 9.5        |
| KBL-3T   | 3/16"    | 4      | 3/8"-24    | 33.3  | 23.9 | 47.5  | 38.1  | 23.4 | 11.1       | 11.0       |
| KBL-4T   | 1/4"     | 6      | 7/16"-20   | 33.7  | 24.6 | 49.5  | 40.4  | 25.9 | 11.1       | 14.2       |
| KBL-5T   | 5/16"    | 8      | 1/2"-20    | 37.3  | 26.9 | 54.1  | 43.7  | 25.9 | 14.3       | 15.8       |
| KBL-6T   | 3/8"     | 10     | 9/16"-18   | 39.6  | 27.7 | 57.9  | 46.0  | 27.7 | 14.3       | 17.4       |
| KBL-8T   | 1/2"     | 12     | 3/4"-16    | 47.2  | 34.5 | 66.3  | 53.6  | 31.8 | 19.0       | 22.2       |
| KBL-10T  | 5/8"     | 16     | 7/8"-14    | 56.2  | 39.6 | 77.3  | 60.7  | 35.8 | 22.2       | 25.4       |
| KBL-12T  | 3/4"     | 18, 20 | 1 1/16"-12 | 60.7  | 45.2 | 83.1  | 67.6  | 39.6 | 27.0       | 31.7       |
| KBL-14T  | 7/8"     | 22     | 1 3/16"-12 | 66.4  | 48.8 | 88.7  | 71.1  | 39.6 | 33.3       | 34.9       |
| KBL-16T  | 1"       | 25     | 1 5/16"-12 | 68.3  | 49.3 | 90.1  | 71.1  | 39.6 | 33.3       | 38.1       |
| KBL-20T  | 1-1/4"   | 32     | 1 5/8"-12  | 73.6  | 55.1 | 97.7  | 79.2  | 40.9 | 41.3       | 50.8       |
| KBL-24T  | 1-1/2"   | 38     | 1 7/8"-12  | 86.1  | 59.4 | 113.6 | 86.9  | 41.1 | 47.6       | 57.1       |
| KBL-32T  | 2"       | 50     | 2 1/2"-12  | 100.9 | 73.4 | 131.9 | 104.4 | 48.5 | 63.5       | 73.0       |

Fitting Port Reducer

**KPR**



**Tube Port to Tube Port**

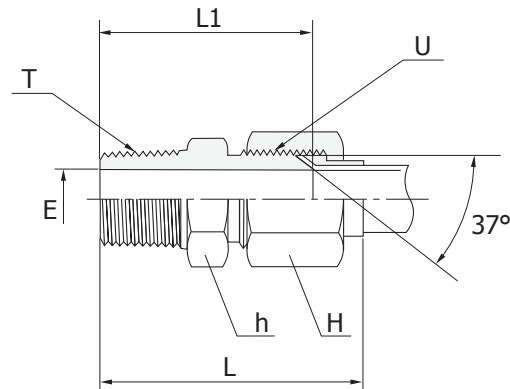
| Part No.   | Reducing Tube O.D | U (UNF)    | E    | L    |
|------------|-------------------|------------|------|------|
| KPR6T-4T   | 3/8" X 1/4"       | 7/16"-20   | 4.4  | 24.6 |
| KPR8T-4T   | 1/2" X 1/4"       | 7/16"-20   | 4.4  | 25.4 |
| KPR8T-6T   | 3/8" X 3/8"       | 9/16"-18   | 7.5  | 25.4 |
| KPR10T-4T  | 5/8" X 1/4"       | 7/16"-20   | 4.4  | 26.2 |
| KPR10T-6T  | 3/8" X 3/8"       | 9/16"-18   | 7.5  | 26.2 |
| KPR12T-4T  | 3/4" X 1/4"       | 7/16"-20   | 4.4  | 27.7 |
| KPR12T-6T  | 3/4" X 3/8"       | 9/16"-18   | 7.5  | 27.7 |
| KPR12T-8T  | 3/4" X 1/2"       | 3/4"-16    | 10.0 | 30.2 |
| KPR16T-12T | 1" X 3/4"         | 1-1/16"-12 | 15.5 | 37.3 |
| KPR20T-12T | 1-1/4" X 3/4"     | 1-1/16"-12 | 15.5 | 38.3 |
| KPR20T-16T | 1-1/4" X 1"       | 1-5/16"-12 | 21.5 | 40.3 |
| KPR24T-20T | 1-1/2" X 1-1/4"   | 1 5/8"-12  | 27.5 | 42.9 |



## K Series JIC Tube Fittings SAE J514 37° Flared

Male Connector

**KMC**

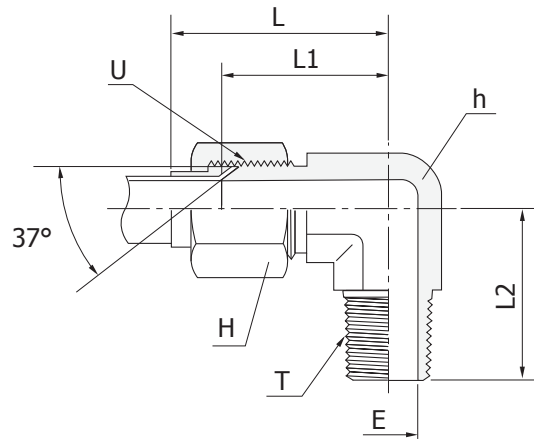


### Tube to Male Pipe

| Part No.   | Tube O.D |        | T<br>(NPT) | U<br>(UNF) | E    | L     | L1   | h<br>(HEX) | H<br>(HEX) |
|------------|----------|--------|------------|------------|------|-------|------|------------|------------|
|            | Inch     | Metric |            |            |      |       |      |            |            |
| KMC2T-2N   | 1/8"     | 3      | 1/8"       | 5/16"-24   | 1.6  | 36.0  | 28.2 | 11.1       | 9.5        |
| KMC3T-2N   | 3/16"    | 4      | 1/8"       | 3/8"-24    | 3.2  | 38.4  | 29.0 | 11.1       | 11.0       |
| KMC4T-2N   | 1/4"     | 6      | 1/8"       | 7/16"-20   | 4.4  | 40.1  | 31.0 | 12.7       | 14.2       |
| KMC5T-2N   | 5/16"    | 8      | 1/8"       | 1/2"-20    | 6.0  | 41.4  | 31.0 | 14.2       | 15.8       |
| KMC6T-4N   | 3/8"     | 10     | 1/4"       | 9/16"-18   | 7.5  | 48.2  | 36.3 | 15.8       | 17.4       |
| KMC8T-6N   | 1/2"     | 12     | 3/8"       | 3/4"-16    | 9.9  | 51.6  | 38.9 | 20.6       | 22.2       |
| KMC10T-8N  | 5/8"     | 16     | 1/2"       | 7/8"-14    | 12.3 | 64.6  | 48.0 | 20.6       | 25.4       |
| KMC12T-12N | 3/4"     | 18, 20 | 3/4"       | 1 1/16"-12 | 15.5 | 67.8  | 52.3 | 28.5       | 31.7       |
| KMC14T-12N | 7/8"     | 22     | 3/4"       | 1 3/16"-12 | 18.0 | 70.7  | 53.1 | 31.7       | 34.9       |
| KMC16T-16N | 1"       | 25     | 1"         | 1 5/16"-12 | 21.5 | 77.4  | 58.4 | 34.9       | 38.1       |
| KMC20T-20N | 1-1/4"   | 32     | 1-1/4"     | 1 5/8"-12  | 27.5 | 80.7  | 62.2 | 42.8       | 50.8       |
| KMC24T-24N | 1-1/2"   | 38     | 1-1/2"     | 1 7/8"-12  | 33.0 | 94.8  | 68.1 | 50.8       | 57.1       |
| KMC32T-32N | 2"       | 50     | 2"         | 2 1/2"-12  | 45.0 | 106.5 | 79.0 | 66.6       | 73.0       |

Male Elbow

**KLM**



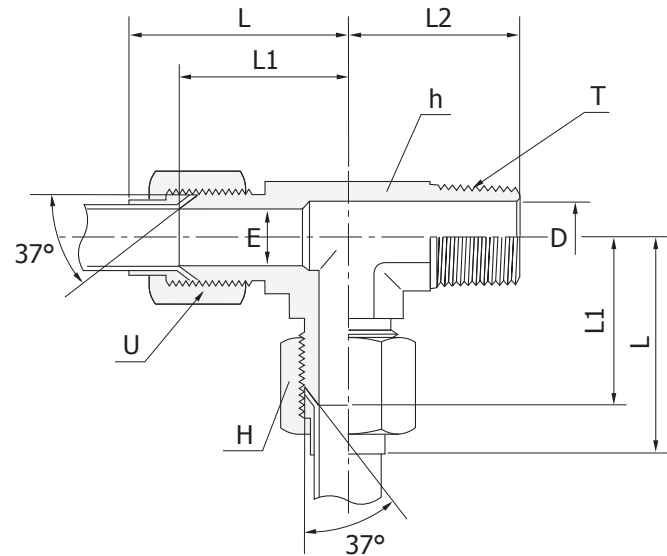
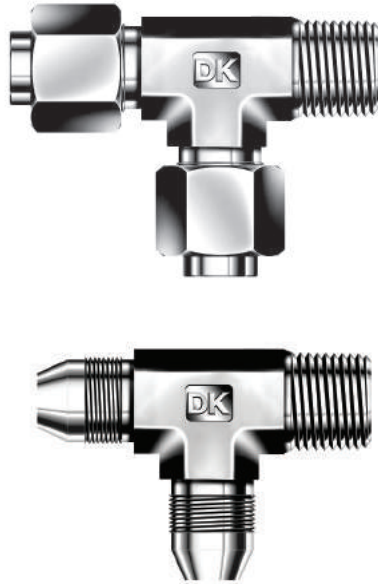
**Tube to Male Pipe**

| Part No.   | Tube O.D |        | T<br>(NPT) | U<br>(UNF) | E    | L     | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|------------|----------|--------|------------|------------|------|-------|------|------|------------|------------|
|            | Inch     | Metric |            |            |      |       |      |      |            |            |
| KLM2T-2N   | 1/8"     | 3      | 1/8"       | 5/16"-24   | 1.6  | 27.4  | 19.6 | 18.3 | 11.1       | 9.5        |
| KLM3T-2N   | 3/16"    | 4      | 1/8"       | 3/8"-24    | 3.2  | 30.5  | 21.1 | 18.3 | 11.1       | 11.0       |
| KLM4T-2N   | 1/4"     | 6      | 1/8"       | 7/16"-20   | 4.4  | 31.7  | 22.6 | 19.8 | 11.1       | 14.2       |
| KLM5T-2N   | 5/16"    | 8      | 1/8"       | 1/2"-20    | 6.0  | 34.5  | 24.1 | 19.8 | 14.3       | 15.8       |
| KLM6T-4N   | 3/8"     | 10     | 1/4"       | 9/16"-18   | 7.5  | 38.8  | 26.9 | 27.7 | 14.3       | 17.4       |
| KLM8T-6N   | 1/2"     | 12     | 3/8"       | 3/4"-16    | 9.9  | 44.5  | 31.8 | 31.0 | 19.0       | 22.2       |
| KLM10T-8N  | 5/8"     | 16     | 1/2"       | 7/8"-14    | 12.3 | 53.4  | 36.8 | 37.3 | 22.2       | 25.4       |
| KLM12T-12N | 3/4"     | 18, 20 | 3/4"       | 1 1/16"-12 | 15.5 | 57.7  | 42.2 | 40.4 | 27.0       | 31.7       |
| KLM14T-12N | 7/8"     | 22     | 3/4"       | 1 3/16"-12 | 18.0 | 63.3  | 45.7 | 42.9 | 33.3       | 34.9       |
| KLM16T-16N | 1"       | 25     | 1"         | 1 5/16"-12 | 21.5 | 65.0  | 46.0 | 50.0 | 33.3       | 38.1       |
| KLM20T-20N | 1-1/4"   | 32     | 1-1/4"     | 1 5/8"-12  | 27.5 | 70.8  | 52.3 | 60.5 | 41.3       | 50.8       |
| KLM24T-24N | 1-1/2"   | 38     | 1-1/2"     | 1 7/8"-12  | 33.0 | 85.9  | 59.2 | 67.1 | 47.6       | 57.1       |
| KLM32T-32N | 2"       | 50     | 2"         | 2 1/2"-12  | 45.0 | 105.2 | 77.7 | 76.2 | 63.5       | 73.0       |

## K Series JIC Tube Fittings SAE J514 37° Flared

Male Run Tee

# KTRM

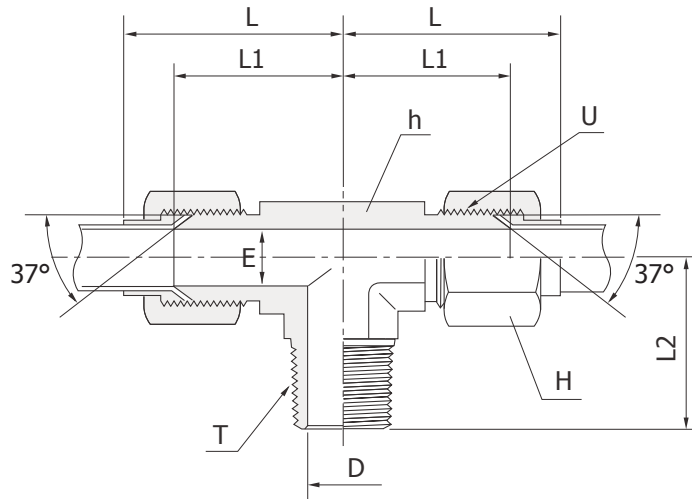


### Tube to Male Pipe

| Part No.    | Tube O.D |        | T<br>(NPT) | U<br>(UNF) | E    | D    | L     | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|-------------|----------|--------|------------|------------|------|------|-------|------|------|------------|------------|
|             | Inch     | Metric |            |            |      |      |       |      |      |            |            |
| KTRM2T-2N   | 1/8"     | 3      | 1/8"       | 5/16"-24   | 1.6  | 4.8  | 27.4  | 19.6 | 18.3 | 11.1       | 9.5        |
| KTRM3T-2N   | 3/16"    | 4      | 1/8"       | 3/8"-24    | 3.2  | 4.8  | 30.5  | 21.1 | 18.3 | 11.1       | 11.0       |
| KTRM4T-2N   | 1/4"     | 6      | 1/8"       | 7/16"-20   | 4.4  | 4.8  | 31.7  | 22.6 | 19.8 | 11.1       | 14.2       |
| KTRM5T-2N   | 5/16"    | 8      | 1/8"       | 1/2"-20    | 6.0  | 4.8  | 34.5  | 24.1 | 19.8 | 14.3       | 15.8       |
| KTRM6T-4N   | 3/8"     | 10     | 1/4"       | 9/16"-18   | 7.5  | 7.0  | 38.8  | 26.9 | 27.7 | 14.3       | 17.4       |
| KTRM8T-6N   | 1/2"     | 12     | 3/8"       | 3/4"-16    | 9.9  | 10.3 | 44.5  | 31.8 | 31.0 | 19.0       | 22.2       |
| KTRM10T-8N  | 5/8"     | 16     | 1/2"       | 7/8"-14    | 12.3 | 13.5 | 53.4  | 36.8 | 37.3 | 22.2       | 25.4       |
| KTRM12T-12N | 3/4"     | 18, 20 | 3/4"       | 1 1/16"-12 | 15.5 | 18.0 | 57.7  | 42.2 | 40.4 | 27.0       | 31.7       |
| KTRM14T-12N | 7/8"     | 22     | 3/4"       | 1 3/16"-12 | 18.0 | 18.0 | 63.3  | 45.7 | 42.9 | 33.3       | 34.9       |
| KTRM16T-16N | 1"       | 25     | 1"         | 1 5/16"-12 | 21.5 | 23.8 | 65.0  | 46.0 | 50.0 | 33.3       | 38.1       |
| KTRM20T-20N | 1-1/4"   | 32     | 1-1/4"     | 1 5/8"-12  | 27.5 | 31.7 | 70.8  | 52.3 | 60.5 | 41.3       | 50.8       |
| KTRM24T-24N | 1-1/2"   | 38     | 1-1/2"     | 1 7/8"-12  | 33.0 | 38.0 | 85.9  | 59.2 | 67.1 | 47.6       | 57.1       |
| KTRM32T-32N | 2"       | 50     | 2"         | 2 1/2"-12  | 45.0 | 49.0 | 105.2 | 77.7 | 76.2 | 63.5       | 73.0       |

Male Branch Tee

**KTBM**



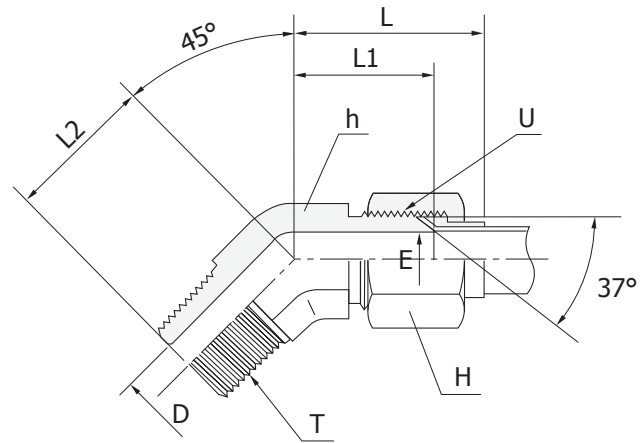
**Tube to Male Pipe**

| Part No.    | Tube O.D |        | T<br>(NPT) | U<br>(UNF) | E    | D    | L     | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|-------------|----------|--------|------------|------------|------|------|-------|------|------|------------|------------|
|             | Inch     | Metric |            |            |      |      |       |      |      |            |            |
| KTBM2T-2N   | 1/8"     | 3      | 1/8"       | 5/16"-24   | 1.6  | 4.8  | 27.4  | 19.6 | 18.3 | 11.1       | 9.5        |
| KTBM3T-2N   | 3/16"    | 4      | 1/8"       | 3/8"-24    | 3.2  | 4.8  | 30.5  | 21.1 | 18.3 | 11.1       | 11.0       |
| KTBM4T-2N   | 1/4"     | 6      | 1/8"       | 7/16"-20   | 4.4  | 4.8  | 31.7  | 22.6 | 19.8 | 11.1       | 14.2       |
| KTBM5T-2N   | 5/16"    | 8      | 1/8"       | 1/2"-20    | 6.0  | 4.8  | 34.5  | 24.1 | 19.8 | 14.3       | 15.8       |
| KTBM6T-4N   | 3/8"     | 10     | 1/4"       | 9/16"-18   | 7.5  | 7.0  | 38.8  | 26.9 | 27.7 | 14.3       | 17.4       |
| KTBM8T-6N   | 1/2"     | 12     | 3/8"       | 3/4"-16    | 9.9  | 10.3 | 44.5  | 31.8 | 31.0 | 19.0       | 22.2       |
| KTBM10T-8N  | 5/8"     | 16     | 1/2"       | 7/8"-14    | 12.3 | 13.5 | 53.4  | 36.8 | 37.3 | 22.2       | 25.4       |
| KTBM12T-12N | 3/4"     | 18, 20 | 3/4"       | 1 1/16"-12 | 15.5 | 18.0 | 57.7  | 42.2 | 40.4 | 27.0       | 31.7       |
| KTBM14T-12N | 7/8"     | 22     | 3/4"       | 1 3/16"-12 | 18.0 | 18.0 | 63.3  | 45.7 | 42.9 | 33.3       | 34.9       |
| KTBM16T-16N | 1"       | 25     | 1"         | 1 5/16"-12 | 21.5 | 23.8 | 65.0  | 46.0 | 50.0 | 35.0       | 38.1       |
| KTBM20T-20N | 1-1/4"   | 32     | 1-1/4"     | 1 5/8"-12  | 37.5 | 31.7 | 70.8  | 52.3 | 60.5 | 41.3       | 50.8       |
| KTBM24T-24N | 1-1/2"   | 38     | 1-1/2"     | 1 7/8"-12  | 33.0 | 38.0 | 85.9  | 59.2 | 67.1 | 47.6       | 57.1       |
| KTBM32T-32N | 2"       | 50     | 2"         | 2 1/2"-12  | 45.0 | 49.0 | 105.2 | 77.7 | 76.2 | 63.5       | 73.0       |

## K Series JIC Tube Fittings SAE J514 37° Flared

45° Male Elbow

### KLBM

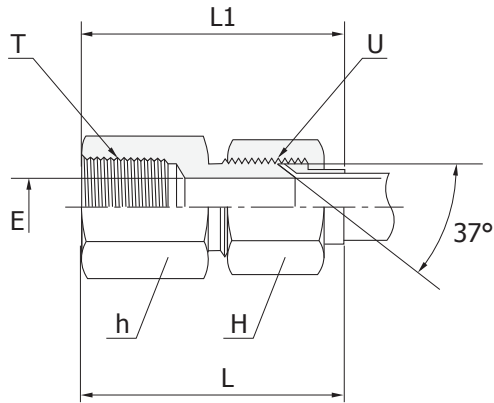


#### Tube to Male Pipe

| Part No.    | Tube O.D |        | T<br>(NPT) | U<br>(UNF) | E    | D    | L    | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|-------------|----------|--------|------------|------------|------|------|------|------|------|------------|------------|
|             | Inch     | Metric |            |            |      |      |      |      |      |            |            |
| KLBM2T-2N   | 1/8"     | 3      | 1/8"       | 5/16"-24   | 1.6  | 1.6  | 25.3 | 17.5 | 13.2 | 11.1       | 9.5        |
| KLBM3T-2N   | 3/16"    | 4      | 1/8"       | 3/8"-24    | 3.2  | 3.2  | 26.9 | 17.5 | 13.2 | 11.1       | 11.0       |
| KLBM4T-2N   | 1/4"     | 6      | 1/8"       | 7/16"-20   | 4.4  | 4.4  | 27.4 | 18.3 | 16.3 | 11.1       | 14.2       |
| KLBM5T-2N   | 5/16"    | 8      | 1/8"       | 1/2"-20    | 6.0  | 6.0  | 30.0 | 19.6 | 16.3 | 14.3       | 15.8       |
| KLBM6T-4N   | 3/8"     | 10     | 1/4"       | 9/16"-18   | 7.5  | 7.5  | 33.0 | 21.1 | 21.8 | 14.3       | 17.4       |
| KLBM8T-6N   | 1/2"     | 12     | 3/8"       | 3/4"-16    | 9.9  | 9.9  | 37.6 | 24.9 | 24.1 | 19.0       | 22.2       |
| KLBM10T-8N  | 5/8"     | 16     | 1/2"       | 7/8"-14    | 12.3 | 12.3 | 44.8 | 28.2 | 29.7 | 22.2       | 25.4       |
| KLBM12T-12N | 3/4"     | 18, 20 | 3/4"       | 1 1/16"-12 | 15.5 | 15.5 | 48.0 | 32.5 | 30.5 | 27.0       | 31.7       |
| KLBM14T-12N | 7/8"     | 22     | 3/4"       | 1 3/16"-12 | 18.0 | 18.0 | 54.4 | 36.8 | 33.0 | 33.3       | 34.9       |
| KLBM16T-16N | 1"       | 25     | 1"         | 1 5/16"-12 | 21.5 | 21.5 | 56.3 | 37.3 | 37.6 | 35.0       | 38.1       |
| KLBM20T-20N | 1-1/4"   | 32     | 1-1/4"     | 1 5/8"-12  | 37.5 | 37.5 | 58.9 | 40.4 | 42.4 | 41.3       | 50.8       |
| KLBM24T-24N | 1-1/2"   | 38     | 1-1/2"     | 1 7/8"-12  | 33.0 | 33.0 | 71.9 | 45.2 | 45.0 | 47.6       | 57.1       |
| KLBM32T-32N | 2"       | 50     | 2"         | 2 1/2"-12  | 45.0 | 45.0 | 83.9 | 56.4 | 53.6 | 63.5       | 73.0       |

Female Connector

**KCF**



**Tube to Female Pipe**

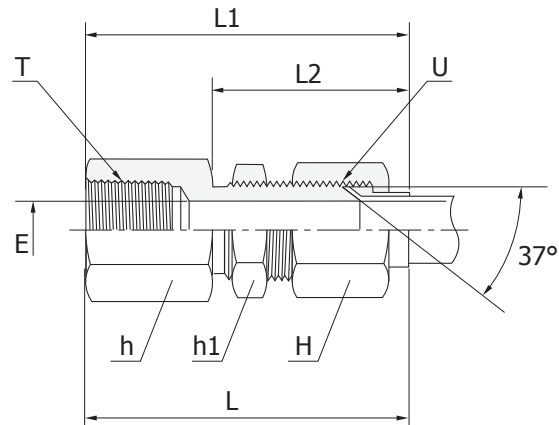
| Part No.   | Tube O.D |        | T<br>(NPT) | U<br>(UNF) | E    | L     | L1   | h<br>(HEX) | H<br>(HEX) |
|------------|----------|--------|------------|------------|------|-------|------|------------|------------|
|            | Inch     | Metric |            |            |      |       |      |            |            |
| KCF2T-2N   | 1/8"     | 3      | 1/8"       | 5/16"-24   | 1.6  | 36.2  | 28.4 | 14.2       | 9.5        |
| KCF3T-2N   | 3/16"    | 4      | 1/8"       | 3/8"-24    | 3.2  | 38.1  | 28.7 | 14.2       | 11.0       |
| KCF4T-2N   | 1/4"     | 6      | 1/8"       | 7/16"-20   | 4.4  | 39.3  | 30.2 | 14.2       | 14.2       |
| KCF5T-2N   | 5/16"    | 8      | 1/8"       | 1/2"-20    | 6.0  | 40.1  | 29.7 | 14.2       | 15.8       |
| KCF6T-4N   | 3/8"     | 10     | 1/4"       | 9/16"-18   | 7.5  | 47.5  | 35.6 | 19.0       | 17.4       |
| KCF8T-6N   | 1/2"     | 12     | 3/8"       | 3/4"-16    | 9.9  | 52.3  | 39.6 | 22.2       | 22.2       |
| KCF10T-8N  | 5/8"     | 16     | 1/2"       | 7/8"-14    | 12.3 | 64.6  | 48.0 | 28.5       | 25.4       |
| KCF12T-12N | 3/4"     | 18, 20 | 3/4"       | 1 1/16"-12 | 15.5 | 67.8  | 52.3 | 34.9       | 31.7       |
| KCF14T-12N | 7/8"     | 22     | 3/4"       | 1 3/16"-12 | 18.0 | 69.9  | 52.3 | 34.9       | 34.9       |
| KCF16T-16N | 1"       | 25     | 1"         | 1 5/16"-12 | 21.5 | 78.7  | 59.7 | 41.2       | 38.1       |
| KCF20T-20N | 1-1/4"   | 32     | 1-1/4"     | 1 5/8"-12  | 37.5 | 81.7  | 63.2 | 50.8       | 50.8       |
| KCF24T-24N | 1-1/2"   | 38     | 1-1/2"     | 1 7/8"-12  | 33.0 | 93.2  | 66.5 | 60.3       | 57.1       |
| KCF32T-32N | 2"       | 50     | 2"         | 2 1/2"-12  | 45.0 | 102.9 | 75.4 | 73.0       | 73.0       |



## K Series JIC Tube Fittings SAE J514 37° Flared

Bulkhead Female Connector

### KCBF

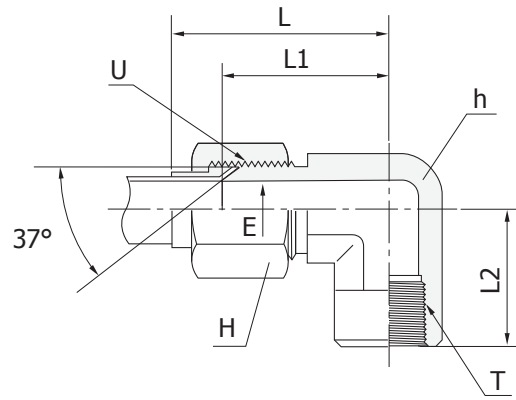


#### Tube to Female Pipe

| Part No.    | Tube O.D |        | T<br>(NPT) | U<br>(UNF) | E    | L     | L1   | L2   | h<br>(HEX) | h1<br>(HEX) | H<br>(HEX) |
|-------------|----------|--------|------------|------------|------|-------|------|------|------------|-------------|------------|
|             | Inch     | Metric |            |            |      |       |      |      |            |             |            |
| KCBF2T-2N   | 1/8"     | 3      | 1/8"       | 5/16"-24   | 1.6  | 49.0  | 41.2 | 28.2 | 14.2       | 14.2        | 9.5        |
| KCBF3T-2N   | 3/16"    | 4      | 1/8"       | 3/8"-24    | 3.2  | 50.6  | 41.2 | 28.2 | 14.2       | 15.8        | 11.0       |
| KCBF4T-2N   | 1/4"     | 6      | 1/8"       | 7/16"-20   | 4.4  | 52.6  | 43.5 | 30.5 | 14.2       | 17.4        | 14.2       |
| KCBF5T-2N   | 5/16"    | 8      | 1/8"       | 1/2"-20    | 6.0  | 53.9  | 43.5 | 30.5 | 14.2       | 19.0        | 15.8       |
| KCBF6T-4N   | 3/8"     | 10     | 1/4"       | 9/16"-18   | 7.5  | 62.5  | 50.5 | 32.5 | 19.0       | 20.6        | 17.4       |
| KCBF8T-6N   | 1/2"     | 12     | 3/8"       | 3/4"-16    | 9.9  | 69.3  | 56.6 | 36.6 | 22.2       | 25.4        | 22.2       |
| KCBF10T-8N  | 5/8"     | 16     | 1/2"       | 7/8"-14    | 12.3 | 82.7  | 66.1 | 40.1 | 29.0       | 28.5        | 25.4       |
| KCBF12T-12N | 3/4"     | 18, 20 | 3/4"       | 1 1/16"-12 | 15.5 | 86.0  | 71.4 | 44.4 | 34.9       | 34.9        | 31.7       |
| KCBF14T-12N | 7/8"     | 22     | 3/4"       | 1 3/16"-12 | 18.0 | 89.0  | 71.4 | 44.4 | 34.9       | 38.1        | 34.9       |
| KCBF16T-16N | 1"       | 25     | 1"         | 1 5/16"-12 | 21.5 | 94.4  | 75.4 | 44.4 | 41.2       | 41.2        | 38.1       |
| KCBF20T-20N | 1-1/4"   | 32     | 1-1/4"     | 1 5/8"-12  | 27.5 | 99.2  | 80.7 | 45.7 | 50.8       | 47.6        | 50.8       |
| KCBF24T-24N | 1-1/2"   | 38     | 1-1/2"     | 1 7/8"-12  | 33.0 | 107.7 | 81.0 | 46.0 | 60.0       | 53.9        | 57.1       |
| KCBF32T-32N | 2"       | 50     | 2"         | 2 1/2"-12  | 45.0 | 120.6 | 93.1 | 53.1 | 73.0       | 69.8        | 73.0       |

Female Elbow

**KLF**

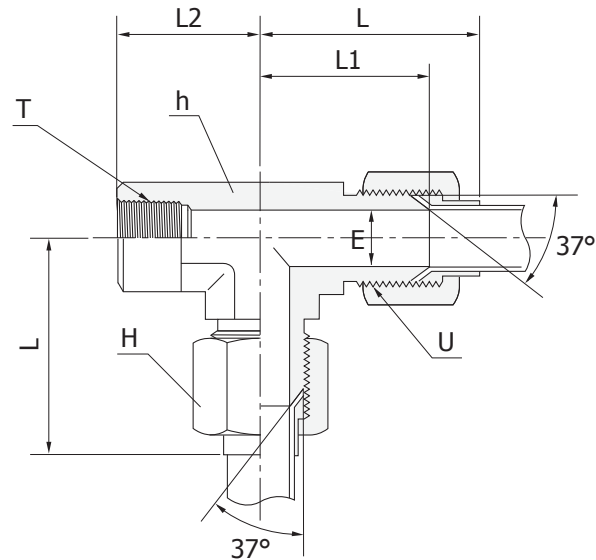


**Tube to Female Pipe**

| Part No.   | Tube O.D |        | T<br>(NPT) | U<br>(UNF) | E    | L     | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|------------|----------|--------|------------|------------|------|-------|------|------|------------|------------|
|            | Inch     | Metric |            |            |      |       |      |      |            |            |
| KLF2T-2N   | 1/8"     | 3      | 1/8"       | 5/16"-24   | 1.6  | 33.2  | 25.4 | 16.8 | 14.3       | 9.5        |
| KLF3T-2N   | 3/16"    | 4      | 1/8"       | 3/8"-24    | 3.2  | 35.6  | 26.2 | 16.8 | 14.3       | 11.0       |
| KLF4T-2N   | 1/4"     | 6      | 1/8"       | 7/16"-20   | 4.4  | 36.5  | 27.4 | 16.8 | 14.3       | 14.2       |
| KLF5T-2N   | 5/16"    | 8      | 1/8"       | 1/2"-20    | 6.0  | 37.8  | 27.4 | 16.8 | 14.3       | 16.0       |
| KLF6T-4N   | 3/8"     | 10     | 1/4"       | 9/16"-18   | 7.5  | 43.1  | 31.2 | 22.4 | 19.0       | 17.4       |
| KLF8T-6N   | 1/2"     | 12     | 3/8"       | 3/4"-16    | 9.9  | 48.8  | 36.1 | 25.9 | 22.2       | 22.2       |
| KLF10T-8N  | 5/8"     | 16     | 1/2"       | 7/8"-14    | 12.3 | 58.3  | 41.7 | 31.2 | 27.0       | 25.4       |
| KLF12T-12N | 3/4"     | 18, 20 | 3/4"       | 1 1/16"-12 | 15.5 | 63.5  | 48.0 | 34.5 | 33.3       | 32.0       |
| KLF14T-12N | 7/8"     | 22     | 3/4"       | 1 3/16"-12 | 18.0 | 64.8  | 47.2 | 36.1 | 33.3       | 35.0       |
| KLF16T-16N | 1"       | 25     | 1"         | 1 5/16"-12 | 21.5 | 74.1  | 55.1 | 41.1 | 41.3       | 38.0       |
| KLF20T-20N | 1-1/4"   | 32     | 1-1/4"     | 1 5/8"-12  | 37.5 | 77.7  | 59.2 | 43.2 | 47.6       | 50.8       |
| KLF24T-24N | 1-1/2"   | 38     | 1-1/2"     | 1 7/8"-12  | 33.0 | 100.1 | 73.4 | 52.8 | 65.1       | 57.0       |
| KLF32T-32N | 2"       | 50     | 2"         | 2 1/2"-12  | 45.0 | 111.3 | 83.8 | 60.7 | 71.4       | 73.0       |

Female Run Tee

**KTRF**

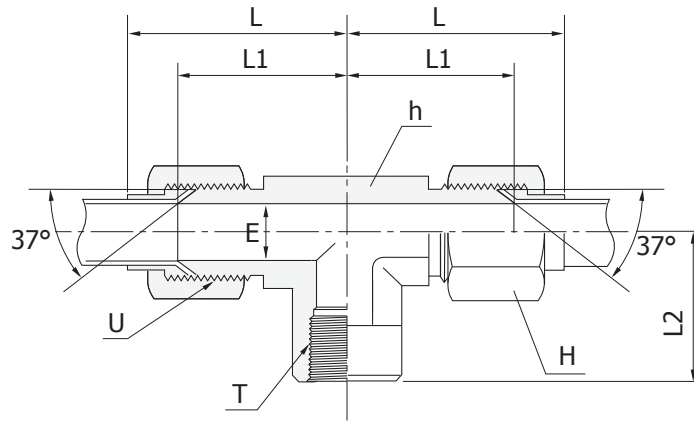
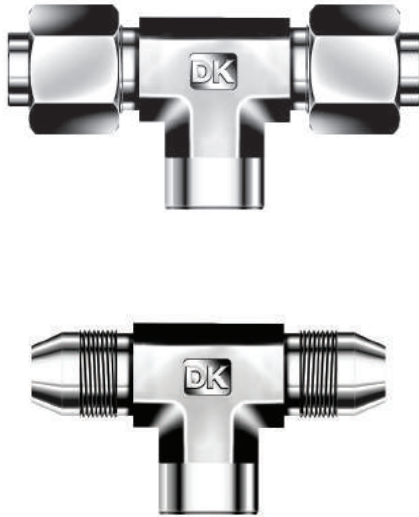


**Tube to Female Pipe**

| Part No.    | Tube O.D |        | T<br>(NPT) | U<br>(UNF) | E    | L     | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|-------------|----------|--------|------------|------------|------|-------|------|------|------------|------------|
|             | Inch     | Metric |            |            |      |       |      |      |            |            |
| KTRF2T-2N   | 1/8"     | 3      | 1/8"       | 5/16"-24   | 1.6  | 33.2  | 25.4 | 16.8 | 14.3       | 9.5        |
| KTRF3T-2N   | 3/16"    | 4      | 1/8"       | 3/8"-24    | 3.2  | 35.6  | 26.2 | 16.8 | 14.3       | 11.0       |
| KTRF4T-2N   | 1/4"     | 6      | 1/8"       | 7/16"-20   | 4.4  | 36.5  | 27.4 | 16.8 | 14.3       | 14.2       |
| KTRF5T-2N   | 5/16"    | 8      | 1/8"       | 1/2"-20    | 6.0  | 37.8  | 27.4 | 16.8 | 14.3       | 16.0       |
| KTRF6T-4N   | 3/8"     | 10     | 1/4"       | 9/16"-18   | 7.5  | 43.1  | 31.2 | 22.4 | 19.0       | 17.4       |
| KTRF8T-6N   | 1/2"     | 12     | 3/8"       | 3/4"-16    | 9.9  | 48.8  | 36.1 | 25.9 | 22.2       | 22.2       |
| KTRF10T-8N  | 5/8"     | 16     | 1/2"       | 7/8"-14    | 12.3 | 58.3  | 41.7 | 31.2 | 27.0       | 25.4       |
| KTRF12T-12N | 3/4"     | 18, 20 | 3/4"       | 1 1/16"-12 | 15.5 | 63.5  | 48.0 | 34.5 | 33.3       | 32.0       |
| KTRF14T-12N | 7/8"     | 22     | 3/4"       | 1 3/16"-12 | 18.0 | 64.8  | 47.2 | 36.1 | 33.3       | 35.0       |
| KTRF16T-16N | 1"       | 25     | 1"         | 1 5/16"-12 | 21.5 | 74.1  | 55.1 | 41.1 | 41.3       | 38.0       |
| KTRF20T-20N | 1-1/4"   | 32     | 1-1/4"     | 1 5/8"-12  | 37.5 | 77.7  | 59.2 | 43.2 | 47.6       | 50.8       |
| KTRF24T-24N | 1-1/2"   | 38     | 1-1/2"     | 1 7/8"-12  | 33.0 | 100.1 | 73.4 | 52.8 | 65.1       | 57.0       |
| KTRF32T-32N | 2"       | 50     | 2"         | 2 1/2"-12  | 45.0 | 111.3 | 83.8 | 60.7 | 71.4       | 73.0       |

Female Branch Tee

**KTBF**

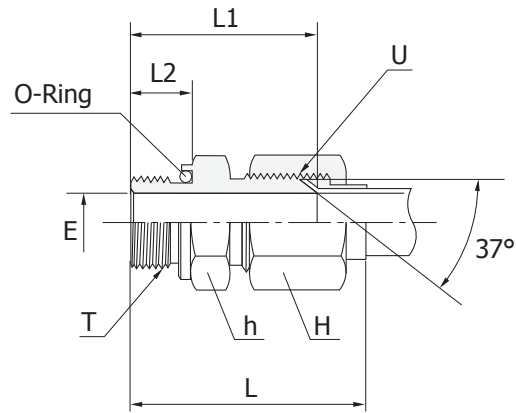
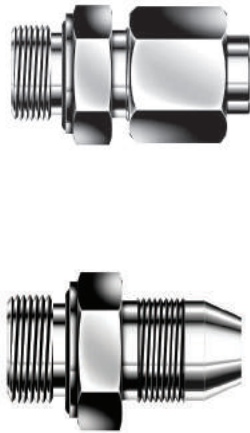


**Tube to Female Pipe**

| Part No.    | Tube O.D |        | T (NPT) | U (UNF)    | E    | L     | L1   | L2   | h (HEX) | H (HEX) |
|-------------|----------|--------|---------|------------|------|-------|------|------|---------|---------|
|             | Inch     | Metric |         |            |      |       |      |      |         |         |
| KTBF2T-2N   | 1/8"     | 3      | 1/8"    | 5/16"-24   | 1.6  | 33.2  | 25.4 | 16.8 | 14.3    | 9.5     |
| KTBF3T-2N   | 3/16"    | 4      | 1/8"    | 3/8"-24    | 3.2  | 35.6  | 26.2 | 16.8 | 14.3    | 11.0    |
| KTBF4T-2N   | 1/4"     | 6      | 1/8"    | 7/16"-20   | 4.4  | 36.5  | 27.4 | 16.8 | 14.3    | 14.2    |
| KTBF5T-2N   | 5/16"    | 8      | 1/8"    | 1/2"-20    | 6.0  | 37.8  | 27.4 | 16.8 | 14.3    | 16.0    |
| KTBF6T-4N   | 3/8"     | 10     | 1/4"    | 9/16"-18   | 7.5  | 43.1  | 31.2 | 22.4 | 19.0    | 17.4    |
| KTBF8T-6N   | 1/2"     | 12     | 3/8"    | 3/4"-16    | 9.9  | 48.8  | 36.1 | 25.9 | 22.2    | 22.2    |
| KTBF10T-8N  | 5/8"     | 16     | 1/2"    | 7/8"-14    | 12.3 | 58.3  | 41.7 | 31.2 | 27.0    | 25.4    |
| KTBF12T-12N | 3/4"     | 18, 20 | 3/4"    | 1 1/16"-12 | 15.5 | 63.5  | 48.0 | 34.5 | 33.3    | 32.0    |
| KTBF14T-12N | 7/8"     | 22     | 3/4"    | 1 3/16"-12 | 18.0 | 64.8  | 47.2 | 36.1 | 33.3    | 35.0    |
| KTBF16T-16N | 1"       | 25     | 1"      | 1 5/16"-12 | 21.5 | 74.1  | 55.1 | 41.1 | 41.3    | 38.0    |
| KTBF20T-20N | 1-1/4"   | 32     | 1-1/4"  | 1 5/8"-12  | 37.5 | 77.7  | 59.2 | 43.2 | 47.6    | 50.8    |
| KTBF24T-24N | 1-1/2"   | 38     | 1-1/2"  | 1 7/8"-12  | 33.0 | 100.1 | 73.4 | 52.8 | 65.1    | 57.0    |
| KTBF32T-32N | 2"       | 50     | 2"      | 2 1/2"-12  | 45.0 | 111.3 | 83.8 | 60.7 | 71.4    | 73.0    |

O-Seal G Male Connector

**KMC-GO**

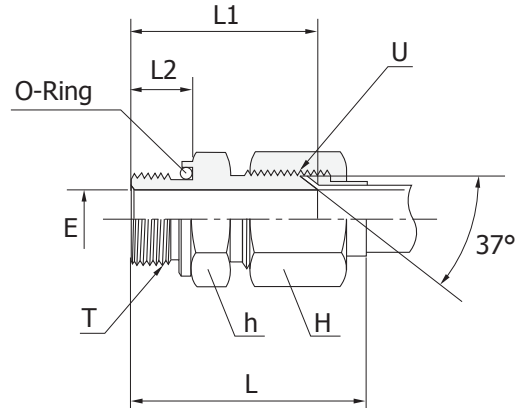


**Tube to Straight Thread**

| Part No.    | Tube O.D |        | T<br>(PF) | U<br>(UNF) | E    | L     | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|-------------|----------|--------|-----------|------------|------|-------|------|------|------------|------------|
|             | Inch     | Metric |           |            |      |       |      |      |            |            |
| KMC2T-2GO   | 1/8"     | 3      | 1/8"      | 5/16"-24   | 1.6  | 35.3  | 27.5 | 8.0  | 11.1       | 9.5        |
| KMC3T-2GO   | 3/16"    | 4      | 1/8"      | 3/8"-24    | 3.2  | 37.9  | 28.5 | 8.0  | 12.7       | 11.0       |
| KMC4T-2GO   | 1/4"     | 6      | 1/8"      | 7/16"-20   | 4.4  | 39.3  | 30.2 | 8.0  | 14.2       | 14.2       |
| KMC5T-2GO   | 5/16"    | 8      | 1/8"      | 1/2"-20    | 6.0  | 40.6  | 30.2 | 8.0  | 15.8       | 16.0       |
| KMC6T-4GO   | 3/8"     | 10     | 1/4"      | 9/16"-18   | 7.5  | 46.9  | 35.0 | 12.0 | 17.4       | 17.4       |
| KMC8T-6GO   | 1/2"     | 12     | 3/8"      | 3/4"-16    | 9.9  | 51.4  | 38.7 | 12.0 | 22.2       | 22.2       |
| KMC10T-8GO  | 5/8"     | 16     | 1/2"      | 7/8"-14    | 12.3 | 61.1  | 44.5 | 14.0 | 25.4       | 25.4       |
| KMC12T-12GO | 3/4"     | 18, 20 | 3/4"      | 1 1/16"-12 | 15.5 | 66.4  | 50.9 | 16.0 | 31.7       | 32.0       |
| KMC14T-12GO | 7/8"     | 22     | 3/4"      | 1 3/16"-12 | 18.0 | 69.0  | 51.4 | 16.0 | 34.9       | 35.0       |
| KMC16T-16GO | 1"       | 25     | 1"        | 1 5/16"-12 | 21.5 | 71.7  | 52.7 | 18.0 | 38.0       | 38.0       |
| KMC20T-20GO | 1-1/4"   | 32     | 1-1/4"    | 1 5/8"-12  | 37.5 | 78.5  | 60.0 | 20.0 | 42.8       | 50.8       |
| KMC24T-24GO | 1-1/2"   | 38     | 1-1/2"    | 1 7/8"-12  | 33.0 | 92.8  | 66.1 | 21.0 | 55.0       | 57.0       |
| KMC32T-32GO | 2"       | 50     | 2"        | 2 1/2"-12  | 45.0 | 108.0 | 80.5 | 25.0 | 70.0       | 73.0       |

O-Seal UNF Male Connector

**KMCS-U**



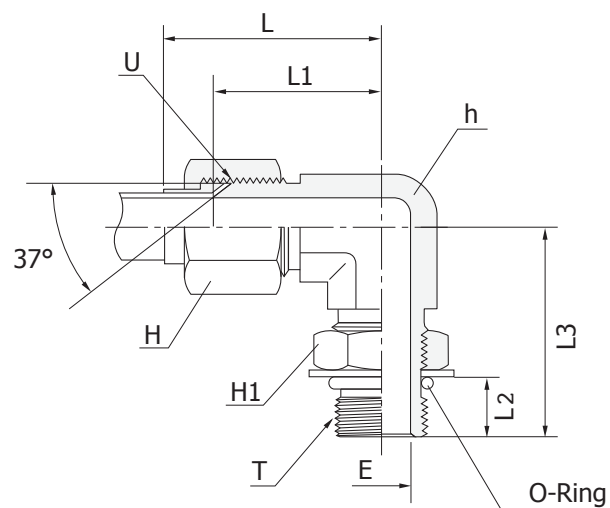
**Tube to Straight Thread**

| Part No.    | Tube O.D |        | T<br>(UNF) | U<br>(UNF) | E    | L    | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|-------------|----------|--------|------------|------------|------|------|------|------|------------|------------|
|             | Inch     | Metric |            |            |      |      |      |      |            |            |
| KMCS2T-02U  | 1/8"     | 3      | 5/16"-24   | 5/16"-24   | 1.6  | 34.7 | 26.9 | 7.5  | 11.1       | 9.5        |
| KMCS3T-03U  | 3/16"    | 4      | 3/8"-24    | 3/8"-24    | 3.2  | 37.3 | 27.9 | 7.5  | 12.7       | 11.0       |
| KMCS4T-04U  | 1/4"     | 6      | 7/16"-20   | 7/16"-20   | 4.4  | 40.3 | 31.2 | 9.1  | 14.2       | 14.2       |
| KMCS5T-05U  | 5/16"    | 8      | 1/2"-20    | 1/2"-20    | 6.0  | 41.6 | 31.2 | 9.1  | 15.8       | 16.0       |
| KMCS6T-06U  | 3/8"     | 10     | 9/16"-18   | 9/16"-18   | 7.5  | 44.9 | 33.0 | 9.9  | 17.4       | 17.4       |
| KMCS8T-08U  | 1/2"     | 12     | 3/4"-16    | 3/4"-16    | 9.9  | 50.3 | 37.6 | 11.1 | 22.2       | 22.2       |
| KMCS10T-10U | 5/8"     | 16     | 7/8"-14    | 7/8"-14    | 12.3 | 59.8 | 43.2 | 12.7 | 25.4       | 25.4       |
| KMCS12T-12U | 3/4"     | 18, 20 | 1 1/16"-12 | 1 1/16"-12 | 15.5 | 65.5 | 50.0 | 15.1 | 31.7       | 32.0       |
| KMCS14T-14U | 7/8"     | 22     | 1 3/16"-12 | 1 3/16"-12 | 18.0 | 68.1 | 50.5 | 15.1 | 34.9       | 35.0       |
| KMCS16T-16U | 1"       | 25     | 1 5/16"-12 | 1 5/16"-12 | 21.5 | 70.8 | 51.8 | 15.1 | 38.1       | 38.0       |
| KMCS20T-20U | 1-1/4"   | 32     | 1 5/8"-12  | 1 5/8"-12  | 37.5 | 73.6 | 55.1 | 15.1 | 47.6       | 50.8       |
| KMCS24T-24U | 1-1/2"   | 38     | 1 7/8"-12  | 1 7/8"-12  | 33.0 | 86.9 | 60.2 | 15.1 | 53.9       | 57.0       |
| KMCS32T-32U | 2"       | 50     | 2 1/2"-12  | 2 1/2"-12  | 45.0 | 98.1 | 70.6 | 15.1 | 69.8       | 73.0       |



O-Seal UNF Male Elbow

## KLS-UP

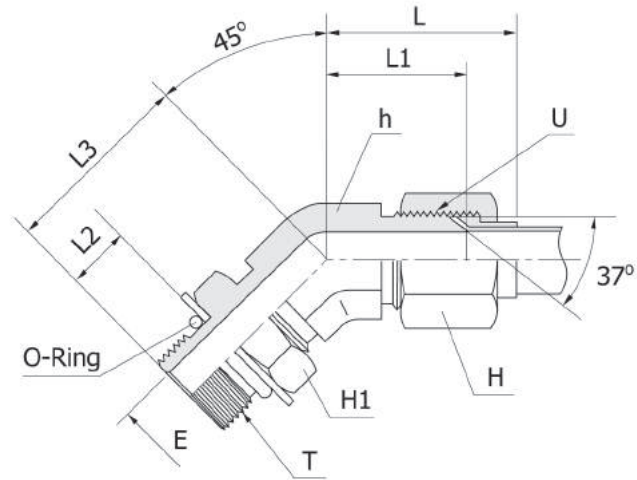


### Tube to Straight Thread

| Part No.    | Tube O.D |        | T<br>(UNF) | U<br>(UNF) | E    | L     | L1   | L2   | L3   | h<br>(HEX) | H<br>(HEX) | H1<br>(HEX) |
|-------------|----------|--------|------------|------------|------|-------|------|------|------|------------|------------|-------------|
|             | Inch     | Metric |            |            |      |       |      |      |      |            |            |             |
| KLS2T-02UP  | 1/8"     | 3      | 5/16"-24   | 5/16"-24   | 1.6  | 27.4  | 19.6 | 8.4  | 23.9 | 11.1       | 9.5        | 14.2        |
| KLS3T-03UP  | 3/16"    | 4      | 3/8"-24    | 3/8"-24    | 3.2  | 30.5  | 21.1 | 8.4  | 23.9 | 11.1       | 11.0       | 15.8        |
| KLS4T-04UP  | 1/4"     | 6      | 7/16"-20   | 7/16"-20   | 4.4  | 31.7  | 22.6 | 9.8  | 26.2 | 11.1       | 14.2       | 17.4        |
| KLS5T-05UP  | 5/16"    | 8      | 1/2"-20    | 1/2"-20    | 6.0  | 34.5  | 24.1 | 9.8  | 28.7 | 14.3       | 16.0       | 19.0        |
| KLS6T-06UP  | 3/8"     | 10     | 9/16"-18   | 9/16"-18   | 7.5  | 38.8  | 26.9 | 9.9  | 31.8 | 14.3       | 17.4       | 20.6        |
| KLS8T-08UP  | 1/2"     | 12     | 3/4"-16    | 3/4"-16    | 9.9  | 44.5  | 31.8 | 11.0 | 36.8 | 19.0       | 22.2       | 25.4        |
| KLS10T-10UP | 5/8"     | 16     | 7/8"-14    | 7/8"-14    | 12.3 | 53.4  | 36.8 | 12.5 | 43.2 | 22.2       | 25.4       | 28.5        |
| KLS12T-12UP | 3/4"     | 18, 20 | 1 1/16"-12 | 1 1/16"-12 | 15.5 | 57.7  | 42.2 | 16.5 | 49.3 | 27.0       | 32.0       | 34.9        |
| KLS14T-14UP | 7/8"     | 22     | 1 3/16"-12 | 1 3/16"-12 | 18.0 | 63.3  | 45.7 | 16.5 | 50.8 | 33.3       | 35.0       | 38.1        |
| KLS16T-16UP | 1"       | 25     | 1 5/16"-12 | 1 5/16"-12 | 21.5 | 65.0  | 46.0 | 16.5 | 52.1 | 33.3       | 38.0       | 41.2        |
| KLS20T-20UP | 1-1/4"   | 32     | 1 5/8"-12  | 1 5/8"-12  | 37.5 | 70.8  | 52.3 | 16.5 | 57.2 | 41.3       | 50.8       | 47.6        |
| KLS24T-24UP | 1-1/2"   | 38     | 1 7/8"-12  | 1 7/8"-12  | 33.0 | 85.9  | 59.2 | 16.5 | 60.7 | 47.6       | 57.0       | 53.9        |
| KLS32T-32UP | 2"       | 50     | 2 1/2"-12  | 2 1/2"-12  | 45.0 | 105.2 | 77.7 | 16.5 | 73.4 | 63.5       | 73.0       | 69.8        |

O-Seal 45° UNF Male Elbow

**KLBS-UP**

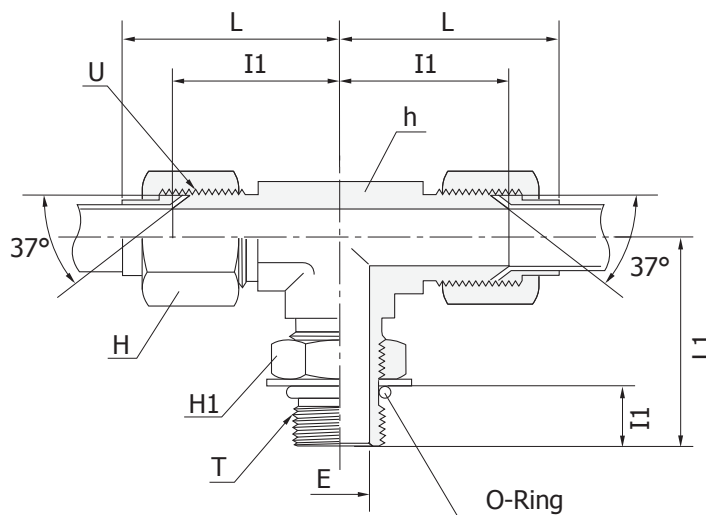


**Tube to Straight Thread**

| Part No.     | Tube O.D |        | T<br>(UNF) | U<br>(UNF) | E    | L    | L1   | L2   | L3   | h<br>(HEX) | H<br>(HEX) | H1<br>(HEX) |
|--------------|----------|--------|------------|------------|------|------|------|------|------|------------|------------|-------------|
|              | Inch     | Metric |            |            |      |      |      |      |      |            |            |             |
| KLBS2T-02UP  | 1/8"     | 3      | 5/16"-24   | 5/16"-24   | 1.6  | 25.3 | 17.5 | 8.4  | 23.9 | 11.1       | 9.5        | 14.2        |
| KLBS3T-03UP  | 3/16"    | 4      | 3/8"-24    | 3/8"-24    | 3.2  | 26.9 | 17.5 | 8.4  | 23.9 | 11.1       | 11.0       | 15.8        |
| KLBS4T-04UP  | 1/4"     | 6      | 7/16"-20   | 7/16"-20   | 4.4  | 27.4 | 18.3 | 9.8  | 23.9 | 11.1       | 14.2       | 17.4        |
| KLBS5T-05UP  | 5/16"    | 8      | 1/2"-20    | 1/2"-20    | 6.0  | 30.0 | 19.6 | 9.8  | 25.4 | 14.3       | 16.0       | 19.0        |
| KLBS6T-06UP  | 3/8"     | 10     | 9/16"-18   | 9/16"-18   | 7.5  | 33.0 | 21.1 | 9.9  | 28.4 | 14.3       | 17.4       | 20.6        |
| KLBS8T-08UP  | 1/2"     | 12     | 3/4"-16    | 3/4"-16    | 9.9  | 37.6 | 24.9 | 11.0 | 32.5 | 19.0       | 22.2       | 25.4        |
| KLBS10T-10UP | 5/8"     | 16     | 7/8"-14    | 7/8"-14    | 12.3 | 44.8 | 28.2 | 12.5 | 36.6 | 22.2       | 25.4       | 28.5        |
| KLBS12T-12UP | 3/4"     | 18, 20 | 1 1/16"-12 | 1 1/16"-12 | 15.5 | 48.0 | 32.5 | 16.5 | 43.9 | 27.0       | 32.0       | 34.9        |
| KLBS14T-14UP | 7/8"     | 22     | 1 3/16"-12 | 1 3/16"-12 | 18.0 | 54.4 | 36.8 | 16.5 | 45.7 | 33.3       | 35.0       | 38.1        |
| KLBS16T-16UP | 1"       | 25     | 1 5/16"-12 | 1 5/16"-12 | 21.5 | 56.3 | 37.3 | 16.5 | 47.2 | 33.3       | 38.0       | 41.2        |
| KLBS20T-20UP | 1-1/4"   | 32     | 1 5/8"-12  | 1 5/8"-12  | 37.5 | 58.9 | 40.4 | 16.5 | 48.5 | 41.3       | 50.8       | 47.6        |
| KLBS24T-24UP | 1-1/2"   | 38     | 1 7/8"-12  | 1 7/8"-12  | 33.0 | 71.9 | 45.2 | 16.5 | 48.5 | 47.6       | 57.0       | 53.9        |
| KLBS32T-32UP | 2"       | 50     | 2 1/2"-12  | 2 1/2"-12  | 45.0 | 83.9 | 56.4 | 16.5 | 47.2 | 63.5       | 73.0       | 69.8        |

O-Seal UNF Branch Tee

## KTBS-UP

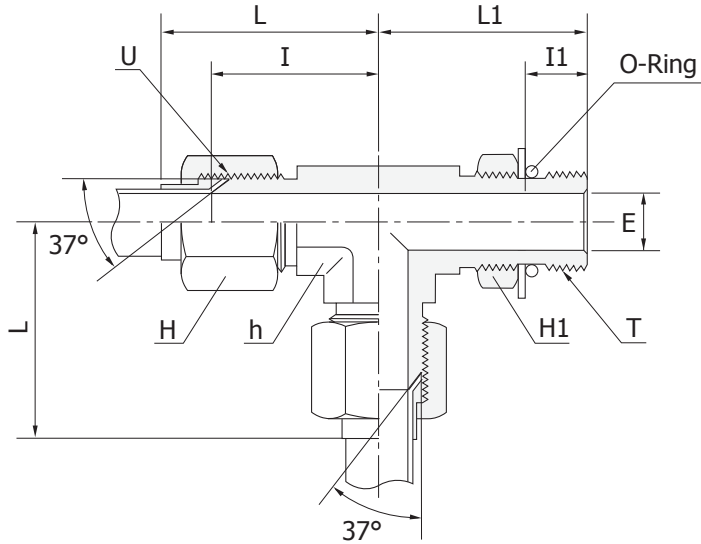
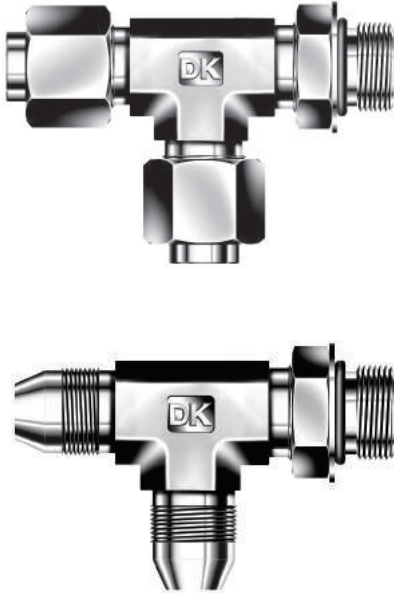


### Tube to Straight Thread

| Part No.     | Tube O.D |        | T<br>(UNF) | U<br>(UNF) | E    | L     | L1   | I    | I1   | h<br>(HEX) | H<br>(HEX) | H1<br>(HEX) |
|--------------|----------|--------|------------|------------|------|-------|------|------|------|------------|------------|-------------|
|              | Inch     | Metric |            |            |      |       |      |      |      |            |            |             |
| KTBS2T-02UP  | 1/8"     | 3      | 5/16"-24   | 5/16"-24   | 1.6  | 27.4  | 23.9 | 19.6 | 8.4  | 11.1       | 9.5        | 14.2        |
| KTBS3T-03UP  | 3/16"    | 4      | 3/8"-24    | 3/8"-24    | 3.2  | 30.5  | 23.9 | 21.1 | 8.4  | 11.1       | 11.0       | 15.8        |
| KTBS4T-04UP  | 1/4"     | 6      | 7/16"-20   | 7/16"-20   | 4.4  | 31.7  | 26.2 | 22.6 | 9.8  | 11.1       | 14.2       | 17.4        |
| KTBS5T-05UP  | 5/16"    | 8      | 1/2"-20    | 1/2"-20    | 6.0  | 34.5  | 28.7 | 24.1 | 9.8  | 14.3       | 16.0       | 19.0        |
| KTBS6T-06UP  | 3/8"     | 10     | 9/16"-18   | 9/16"-18   | 7.5  | 38.8  | 31.8 | 26.9 | 9.9  | 14.3       | 17.4       | 20.6        |
| KTBS8T-08UP  | 1/2"     | 12     | 3/4"-16    | 3/4"-16    | 9.9  | 44.5  | 36.8 | 31.8 | 11.0 | 19.0       | 22.2       | 25.4        |
| KTBS10T-10UP | 5/8"     | 16     | 7/8"-14    | 7/8"-14    | 12.3 | 53.4  | 43.2 | 36.8 | 12.5 | 22.2       | 25.4       | 28.5        |
| KTBS12T-12UP | 3/4"     | 18, 20 | 1 1/16"-12 | 1 1/16"-12 | 15.5 | 57.7  | 49.3 | 42.2 | 16.5 | 27.0       | 32.0       | 34.9        |
| KTBS14T-14UP | 7/8"     | 22     | 1 3/16"-12 | 1 3/16"-12 | 18.0 | 63.3  | 50.8 | 45.7 | 16.5 | 33.3       | 35.0       | 38.1        |
| KTBS16T-16UP | 1"       | 25     | 1 5/16"-12 | 1 5/16"-12 | 21.5 | 65.0  | 52.1 | 46.0 | 16.5 | 33.3       | 38.0       | 41.2        |
| KTBS20T-20UP | 1-1/4"   | 32     | 1 5/8"-12  | 1 5/8"-12  | 37.5 | 70.8  | 57.2 | 52.3 | 16.5 | 41.3       | 50.8       | 47.6        |
| KTBS24T-24UP | 1-1/2"   | 38     | 1 7/8"-12  | 1 7/8"-12  | 33.0 | 85.9  | 60.7 | 59.2 | 16.5 | 47.6       | 57.0       | 53.9        |
| KTBS32T-32UP | 2"       | 50     | 2 1/2"-12  | 2 1/2"-12  | 45.0 | 105.2 | 73.4 | 77.7 | 16.5 | 63.5       | 73.0       | 69.8        |

O-Seal UNF Run Tee

**KTRS-UP**



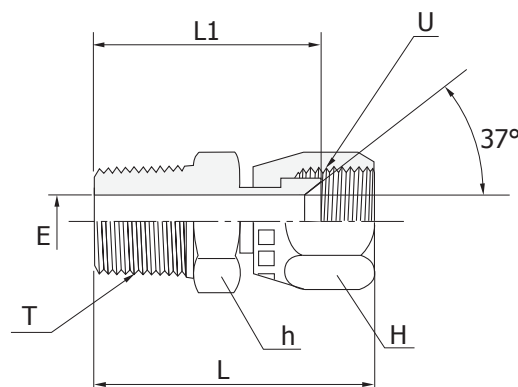
**Tube to Straight Thread**

| Part No.     | Tube O.D |        | T<br>(UNF) | U<br>(UNF) | E    | L     | L1   | I    | I1   | h<br>(HEX) | H<br>(HEX) | H1<br>(HEX) |
|--------------|----------|--------|------------|------------|------|-------|------|------|------|------------|------------|-------------|
|              | Inch     | Metric |            |            |      |       |      |      |      |            |            |             |
| KTRS2T-02UP  | 1/8"     | 3      | 5/16"-24   | 5/16"-24   | 1.6  | 27.4  | 23.9 | 19.6 | 8.4  | 11.1       | 9.5        | 14.2        |
| KTRS3T-03UP  | 3/16"    | 4      | 3/8"-24    | 3/8"-24    | 3.2  | 30.5  | 23.9 | 21.1 | 8.4  | 11.1       | 11.0       | 15.8        |
| KTRS4T-04UP  | 1/4"     | 6      | 7/16"-20   | 7/16"-20   | 4.4  | 31.7  | 26.2 | 22.6 | 9.8  | 11.1       | 14.2       | 17.4        |
| KTRS5T-05UP  | 5/16"    | 8      | 1/2"-20    | 1/2"-20    | 6.0  | 34.5  | 28.7 | 24.1 | 9.8  | 14.3       | 16.0       | 19.0        |
| KTRS6T-06UP  | 3/8"     | 10     | 9/16"-18   | 9/16"-18   | 7.5  | 38.8  | 31.8 | 26.9 | 9.9  | 14.3       | 17.4       | 20.6        |
| KTRS8T-08UP  | 1/2"     | 12     | 3/4"-16    | 3/4"-16    | 9.9  | 44.5  | 36.8 | 31.8 | 11.0 | 19.0       | 22.2       | 25.4        |
| KTRS10T-10UP | 5/8"     | 16     | 7/8"-14    | 7/8"-14    | 12.3 | 53.4  | 43.2 | 36.8 | 12.5 | 22.2       | 25.4       | 28.5        |
| KTRS12T-12UP | 3/4"     | 18, 20 | 1 1/16"-12 | 1 1/16"-12 | 15.5 | 57.7  | 49.3 | 42.2 | 16.5 | 27.0       | 32.0       | 34.9        |
| KTRS14T-14UP | 7/8"     | 22     | 1 3/16"-12 | 1 3/16"-12 | 18.0 | 63.3  | 50.8 | 45.7 | 16.5 | 33.3       | 35.0       | 38.1        |
| KTRS16T-16UP | 1"       | 25     | 1 5/16"-12 | 1 5/16"-12 | 21.5 | 65.0  | 52.1 | 46.0 | 16.5 | 33.3       | 38.0       | 41.2        |
| KTRS20T-20UP | 1-1/4"   | 32     | 1 5/8"-12  | 1 5/8"-12  | 37.5 | 70.8  | 57.2 | 52.3 | 16.5 | 41.3       | 50.8       | 47.6        |
| KTRS24T-24UP | 1-1/2"   | 38     | 1 7/8"-12  | 1 7/8"-12  | 33.0 | 85.9  | 60.7 | 59.2 | 16.5 | 47.6       | 57.0       | 53.9        |
| KTRS32T-32UP | 2"       | 50     | 2 1/2"-12  | 2 1/2"-12  | 45.0 | 105.2 | 73.4 | 77.7 | 16.5 | 63.5       | 73.0       | 69.8        |

## K Series JIC Tube Fittings SAE J514 37° Flared

Swivel Male Connector

**KSMC**

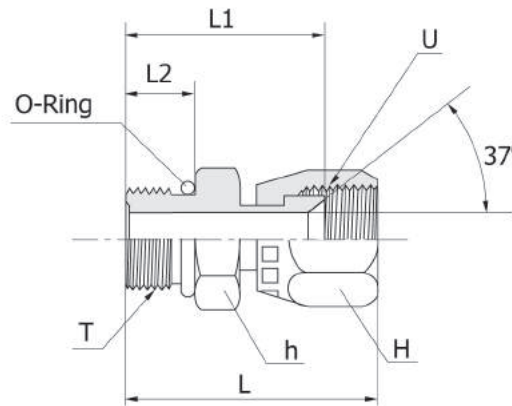


### Swivel Fittings

| Part No.    | Tube O.D |        | T<br>(NPT) | U<br>(UNF) | E    | L    | L1   | h<br>(HEX) | H<br>(HEX) |
|-------------|----------|--------|------------|------------|------|------|------|------------|------------|
|             | Inch     | Metric |            |            |      |      |      |            |            |
| KSMC2T-2N   | 1/8"     | 3      | 1/8"       | 5/16"-24   | 1.6  | 30.0 | 22.0 | 11.1       | 11.1       |
| KSMC3T-2N   | 3/16"    | 4      | 1/8"       | 3/8"-24    | 3.2  | 32.0 | 23.5 | 11.1       | 12.7       |
| KSMC4T-2N   | 1/4"     | 6      | 1/8"       | 7/16"-20   | 4.4  | 34.2 | 25.5 | 12.7       | 14.2       |
| KSMC5T-2N   | 5/16"    | 8      | 1/8"       | 1/2"-20    | 6.0  | 35.0 | 25.5 | 14.2       | 16.0       |
| KSMC6T-4N   | 3/8"     | 10     | 1/4"       | 9/16"-18   | 7.5  | 40.2 | 30.7 | 16.0       | 17.4       |
| KSMC8T-6N   | 1/2"     | 12     | 3/8"       | 3/4"-16    | 9.9  | 42.7 | 32.0 | 21.0       | 22.2       |
| KSMC10T-8N  | 5/8"     | 16     | 1/2"       | 7/8"-14    | 12.3 | 51.3 | 38.6 | 23.8       | 25.4       |
| KSMC12T-12N | 3/4"     | 18, 20 | 3/4"       | 1 1/16"-12 | 15.5 | 54.5 | 40.2 | 29.0       | 32.0       |
| KSMC14T-12N | 7/8"     | 22     | 3/4"       | 1 3/16"-12 | 18.0 | 56.0 | 41.2 | 32.0       | 35.0       |
| KSMC16T-16N | 1"       | 25     | 1"         | 1 5/16"-12 | 21.5 | 63.7 | 48.6 | 36.0       | 38.0       |
| KSMC20T-20N | 1-1/4"   | 32     | 1-1/4"     | 1 5/8"-12  | 37.5 | 68.9 | 53.0 | 46.0       | 50.8       |
| KSMC24T-24N | 1-1/2"   | 38     | 1-1/2"     | 1 7/8"-12  | 33.0 | 77.6 | 59.0 | 50.0       | 57.0       |
| KSMC32T-32N | 2"       | 50     | 2"         | 2 1/2"-12  | 45.0 | 92.9 | 69.1 | 66.7       | 73.0       |

Swivel UNF Male Connector

**KSMCS-U**



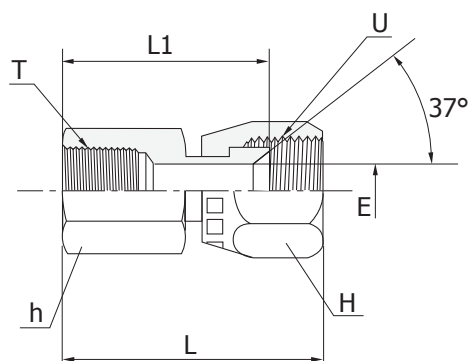
**Swivel Fittings**

| Part No.     | Tube O.D |        | T<br>(UNF) | U<br>(UNF) | L    | L1   | L2   | h<br>(HEX) | H<br>(HEX) |
|--------------|----------|--------|------------|------------|------|------|------|------------|------------|
|              | Inch     | Metric |            |            |      |      |      |            |            |
| KSMCS2T-02U  | 1/8"     | 3      | 5/16"-24   | 5/16"-24   | 30.4 | 22.5 | 7.5  | 11.1       | 11.1       |
| KSMCS3T-02U  | 3/16"    | 4      | 3/8"-24    | 3/8"-24    | 31.0 | 22.7 | 7.5  | 12.7       | 12.7       |
| KSMCS4T-04U  | 1/4"     | 6      | 7/16"-20   | 7/16"-20   | 33.9 | 25.2 | 9.1  | 14.2       | 14.2       |
| KSMCS5T-05U  | 5/16"    | 8      | 1/2"-20    | 1/2"-20    | 35.7 | 26.2 | 9.1  | 15.8       | 15.8       |
| KSMCS6T-06U  | 3/8"     | 10     | 9/16"-18   | 9/16"-18   | 37.4 | 27.9 | 9.9  | 17.4       | 19.0       |
| KSMCS8T-08U  | 1/2"     | 12     | 3/4"-16    | 3/4"-16    | 41.6 | 30.9 | 11.1 | 22.2       | 22.2       |
| KSMCS10T-10U | 5/8"     | 16     | 7/8"-14    | 7/8"-14    | 47.6 | 34.9 | 12.7 | 25.4       | 27.0       |
| KSMCS12T-12U | 3/4"     | 18, 20 | 1 1/16"-12 | 1 1/16"-12 | 54.4 | 40.1 | 15.1 | 31.8       | 32.0       |
| KSMCS14T-14U | 7/8"     | 22     | 1 3/16"-12 | 1 3/16"-12 | 55.6 | 40.9 | 15.1 | 34.9       | 34.9       |
| KSMCS16T-16U | 1"       | 25     | 1 5/16"-12 | 1 5/16"-12 | 56.8 | 41.7 | 15.1 | 38.1       | 38.1       |
| KSMCS20T-20U | 1-1/4"   | 32     | 1 5/8"-12  | 1 5/8"-12  | 63.2 | 47.3 | 15.1 | 47.6       | 50.8       |
| KSMCS24T-24U | 1-1/2"   | 38     | 1 7/8"-12  | 1 7/8"-12  | 71.3 | 52.7 | 15.1 | 54.0       | 60.0       |
| KSMCS32T-32U | 2"       | 50     | 2 1/2"-12  | 2 1/2"-12  | 72.5 | 58.7 | 15.1 | 70.0       | 73.0       |

## K Series JIC Tube Fittings SAE J514 37° Flared

Swivel Female Connector

# KSCF

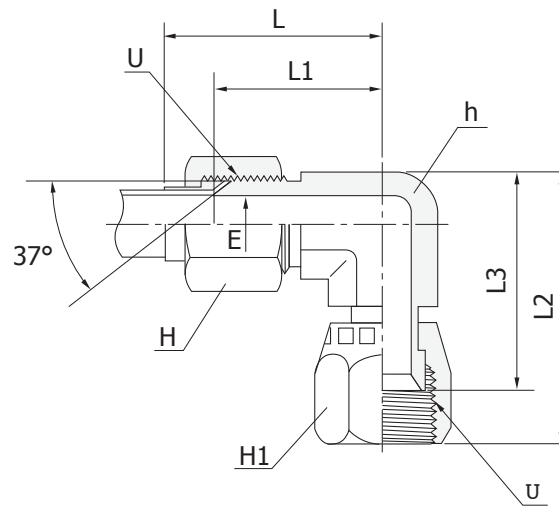


### Swivel Fittings

| Part No.    | Tube O.D |        | T<br>(NPT) | U<br>(UNF) | E    | L    | L1   | h<br>(HEX) | H<br>(HEX) |
|-------------|----------|--------|------------|------------|------|------|------|------------|------------|
|             | Inch     | Metric |            |            |      |      |      |            |            |
| KSCF2T-2N   | 1/8"     | 3      | 1/8"       | 5/16"-24   | 1.6  | 36.1 | 28.2 | 14.2       | 11.1       |
| KSCF3T-2N   | 3/16"    | 4      | 1/8"       | 3/8"-24    | 3.2  | 37.3 | 29.0 | 14.2       | 12.7       |
| KSCF4T-2N   | 1/4"     | 6      | 1/8"       | 7/16"-20   | 4.4  | 39.7 | 31.0 | 14.2       | 14.2       |
| KSCF5T-2N   | 5/16"    | 8      | 1/8"       | 1/2"-20    | 6.0  | 40.5 | 31.0 | 14.2       | 16.0       |
| KSCF6T-4N   | 3/8"     | 10     | 1/4"       | 9/16"-18   | 7.5  | 45.8 | 36.3 | 19.0       | 17.4       |
| KSCF8T-6N   | 1/2"     | 12     | 3/8"       | 3/4"-16    | 9.9  | 47.0 | 38.9 | 22.2       | 22.2       |
| KSCF10T-8N  | 5/8"     | 16     | 1/2"       | 7/8"-14    | 12.3 | 51.6 | 48.0 | 29.0       | 25.4       |
| KSCF12T-12N | 3/4"     | 18, 20 | 3/4"       | 1 1/16"-12 | 15.5 | 66.6 | 52.3 | 35.0       | 32.0       |
| KSCF14T-12N | 7/8"     | 22     | 3/4"       | 1 3/16"-12 | 18.0 | 67.8 | 53.1 | 35.0       | 35.0       |
| KSCF16T-16N | 1"       | 25     | 1"         | 1 5/16"-12 | 21.5 | 73.5 | 58.4 | 41.0       | 38.0       |
| KSCF20T-20N | 1-1/4"   | 32     | 1-1/4"     | 1 5/8"-12  | 37.5 | 78.1 | 62.2 | 50.8       | 50.8       |
| KSCF24T-24N | 1-1/2"   | 38     | 1-1/2"     | 1 7/8"-12  | 33.0 | 86.7 | 68.1 | 60.0       | 57.0       |
| KSCF32T-32N | 2"       | 50     | 2"         | 2 1/2"-12  | 45.0 | 89.3 | 65.5 | 73.0       | 73.0       |

Swivel Elbow

**KSL**



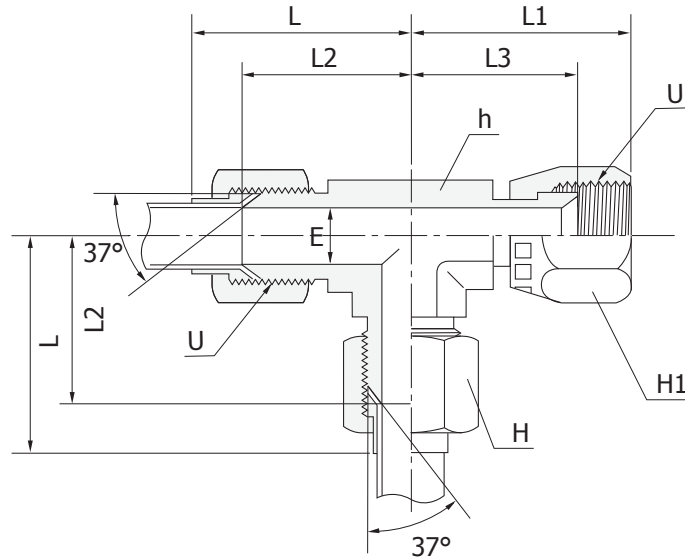
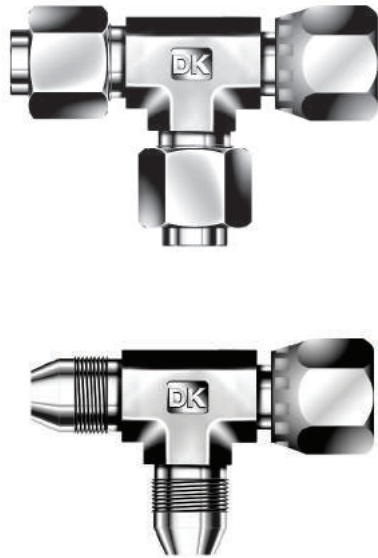
**Swivel Fittings**

| Part No. | Tube O.D |        | U<br>(UNF) | E    | L     | L1   | L2   | L3   | h<br>(HEX) | H<br>(HEX) | H1<br>(HEX) |
|----------|----------|--------|------------|------|-------|------|------|------|------------|------------|-------------|
|          | Inch     | Metric |            |      |       |      |      |      |            |            |             |
| KSL-2T   | 1/8"     | 3      | 5/16"-24   | 1.6  | 27.4  | 19.6 | 24.6 | 16.7 | 11.1       | 9.5        | 11.1        |
| KSL-3T   | 3/16"    | 4      | 3/8"-24    | 3.2  | 30.5  | 21.1 | 25.4 | 17.1 | 11.1       | 11.0       | 12.7        |
| KSL-4T   | 1/4"     | 6      | 7/16"-20   | 4.4  | 31.7  | 22.6 | 25.4 | 16.7 | 11.1       | 14.2       | 14.2        |
| KSL-5T   | 5/16"    | 8      | 1/2"-20    | 6.0  | 34.5  | 24.1 | 26.9 | 17.4 | 14.3       | 16.0       | 15.8        |
| KSL-6T   | 3/8"     | 10     | 9/16"-18   | 7.5  | 38.8  | 26.9 | 31.8 | 22.3 | 14.3       | 17.4       | 17.4        |
| KSL-8T   | 1/2"     | 12     | 3/4"-16    | 9.9  | 44.5  | 31.8 | 35.1 | 24.4 | 19.0       | 22.2       | 22.2        |
| KSL-10T  | 5/8"     | 16     | 7/8"-14    | 12.3 | 53.4  | 36.8 | 41.1 | 28.4 | 22.2       | 25.4       | 25.4        |
| KSL-12T  | 3/4"     | 18, 20 | 1 1/16"-12 | 15.5 | 57.7  | 42.2 | 44.4 | 30.1 | 27.0       | 32.0       | 31.7        |
| KSL-14T  | 7/8"     | 22     | 1 3/16"-12 | 18.0 | 63.3  | 45.7 | 45.2 | 30.5 | 33.3       | 35.0       | 34.9        |
| KSL-16T  | 1"       | 25     | 1 5/16"-12 | 21.5 | 65.0  | 46.0 | 50.8 | 35.7 | 33.3       | 38.0       | 38.1        |
| KSL-20T  | 1-1/4"   | 32     | 1 5/8"-12  | 37.5 | 70.8  | 52.3 | 58.7 | 42.8 | 41.3       | 50.8       | 50.8        |
| KSL-24T  | 1-1/2"   | 38     | 1 7/8"-12  | 33.0 | 85.9  | 59.2 | 65.8 | 47.2 | 47.6       | 57.1       | 57.1        |
| KSL-32T  | 2"       | 50     | 2 1/2"-12  | 45.0 | 105.2 | 77.7 | 85.9 | 62.1 | 63.5       | 73.0       | 69.8        |



Swivel Run Tee

**KSRT**

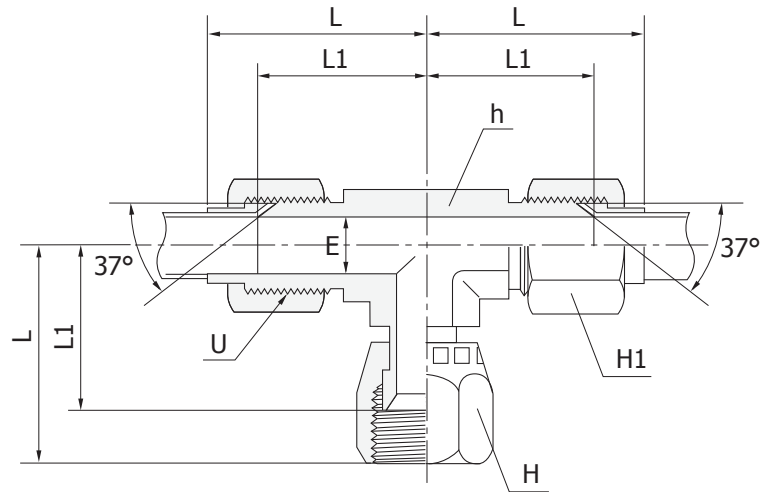
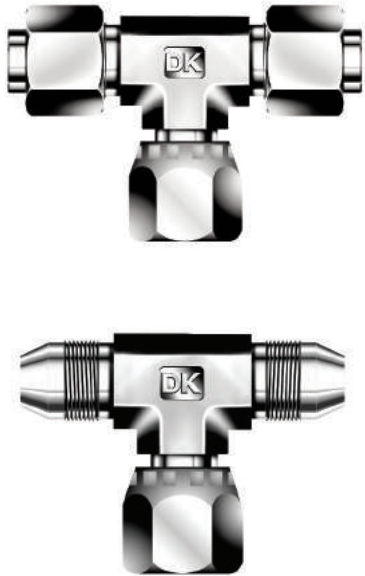


**Swivel Fittings**

| Part No. | Tube O.D |        | U<br>(UNF) | E    | L     | L1   | L2   | L3   | h<br>(HEX) | H<br>(HEX) | H1<br>(HEX) |
|----------|----------|--------|------------|------|-------|------|------|------|------------|------------|-------------|
|          | Inch     | Metric |            |      |       |      |      |      |            |            |             |
| KSRT-2T  | 1/8"     | 3      | 5/16"-24   | 1.6  | 27.4  | 24.6 | 19.6 | 16.7 | 11.1       | 9.5        | 11.1        |
| KSRT-3T  | 3/16"    | 4      | 3/8"-24    | 3.2  | 30.5  | 25.4 | 21.1 | 17.1 | 11.1       | 11.0       | 12.7        |
| KSRT-4T  | 1/4"     | 6      | 7/16"-20   | 4.4  | 31.7  | 25.4 | 22.6 | 16.7 | 11.1       | 14.2       | 14.2        |
| KSRT-5T  | 5/16"    | 8      | 1/2"-20    | 6.0  | 34.5  | 26.9 | 24.1 | 17.4 | 14.3       | 16.0       | 15.8        |
| KSRT-6T  | 3/8"     | 10     | 9/16"-18   | 7.5  | 38.8  | 31.8 | 26.9 | 22.3 | 14.3       | 17.4       | 17.4        |
| KSRT-8T  | 1/2"     | 12     | 3/4"-16    | 9.9  | 44.5  | 35.1 | 31.8 | 24.4 | 19.0       | 22.2       | 22.2        |
| KSRT-10T | 5/8"     | 16     | 7/8"-14    | 12.3 | 53.4  | 41.1 | 36.8 | 28.4 | 22.2       | 25.4       | 25.4        |
| KSRT-12T | 3/4"     | 18, 20 | 1 1/16"-12 | 15.5 | 57.7  | 44.4 | 42.2 | 30.1 | 27.0       | 32.0       | 31.7        |
| KSRT-14T | 7/8"     | 22     | 1 3/16"-12 | 18.0 | 63.3  | 45.2 | 45.7 | 30.5 | 33.3       | 35.0       | 34.9        |
| KSRT-16T | 1"       | 25     | 1 5/16"-12 | 21.5 | 65.0  | 50.8 | 46.0 | 35.7 | 33.3       | 38.0       | 38.1        |
| KSRT-20T | 1-1/4"   | 32     | 1 5/8"-12  | 37.5 | 70.8  | 58.7 | 52.3 | 42.8 | 41.3       | 50.8       | 50.8        |
| KSRT-24T | 1-1/2"   | 38     | 1 7/8"-12  | 33.0 | 85.9  | 65.8 | 59.2 | 47.2 | 47.6       | 57.1       | 57.0        |
| KSRT-32T | 2"       | 50     | 2 1/2"-12  | 45.0 | 105.2 | 85.9 | 77.7 | 62.1 | 63.5       | 73.0       | 69.8        |

Swivel Branch Tee

**KSBT**



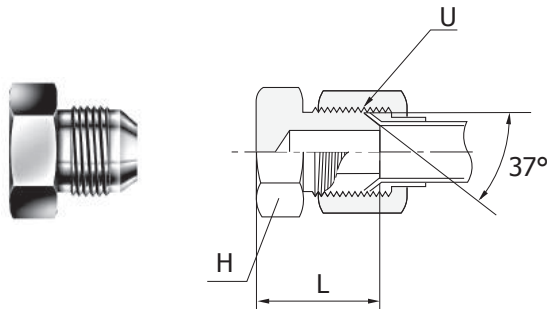
**Swivel Fittings**

| Part No. | Tube O.D |        | U<br>(UNF) | E    | L     | L1   | L2   | L3   | h<br>(HEX) | H<br>(HEX) | H1<br>(HEX) |
|----------|----------|--------|------------|------|-------|------|------|------|------------|------------|-------------|
|          | Inch     | Metric |            |      |       |      |      |      |            |            |             |
| KSBT-2T  | 1/8"     | 3      | 5/16"-24   | 1.6  | 27.4  | 24.6 | 19.6 | 16.7 | 11.1       | 9.5        | 11.1        |
| KSBT-3T  | 3/16"    | 4      | 3/8"-24    | 3.2  | 30.5  | 25.4 | 21.1 | 17.1 | 11.1       | 11.0       | 12.7        |
| KSBT-4T  | 1/4"     | 6      | 7/16"-20   | 4.4  | 31.7  | 25.4 | 22.6 | 16.7 | 11.1       | 14.2       | 14.2        |
| KSBT-5T  | 5/16"    | 8      | 1/2"-20    | 6.0  | 34.5  | 26.9 | 24.1 | 17.4 | 14.3       | 16.0       | 15.8        |
| KSBT-6T  | 3/8"     | 10     | 9/16"-18   | 7.5  | 38.8  | 31.8 | 26.9 | 22.3 | 14.3       | 17.4       | 17.4        |
| KSBT-8T  | 1/2"     | 12     | 3/4"-16    | 9.9  | 44.5  | 35.1 | 31.8 | 24.4 | 19.0       | 22.2       | 22.2        |
| KSBT-10T | 5/8"     | 16     | 7/8"-14    | 12.3 | 53.4  | 41.1 | 36.8 | 28.4 | 22.2       | 25.4       | 25.4        |
| KSBT-12T | 3/4"     | 18, 20 | 1 1/16"-12 | 15.5 | 57.7  | 44.4 | 42.2 | 30.1 | 27.0       | 32.0       | 31.7        |
| KSBT-14T | 7/8"     | 22     | 1 3/16"-12 | 18.0 | 63.3  | 45.2 | 45.7 | 30.5 | 33.3       | 35.0       | 34.9        |
| KSBT-16T | 1"       | 25     | 1 5/16"-12 | 21.5 | 65.0  | 50.8 | 46.0 | 35.7 | 33.3       | 38.0       | 38.1        |
| KSBT-20T | 1-1/4"   | 32     | 1 5/8"-12  | 37.5 | 70.8  | 58.7 | 52.3 | 42.8 | 41.3       | 50.8       | 50.8        |
| KSBT-24T | 1-1/2"   | 38     | 1 7/8"-12  | 33.0 | 85.9  | 65.8 | 59.2 | 47.2 | 47.6       | 57.1       | 57.0        |
| KSBT-32T | 2"       | 50     | 2 1/2"-12  | 45.0 | 105.2 | 85.9 | 77.7 | 62.1 | 63.5       | 73.0       | 69.8        |

## K Series JIC Tube Fittings SAE J514 37° Flared

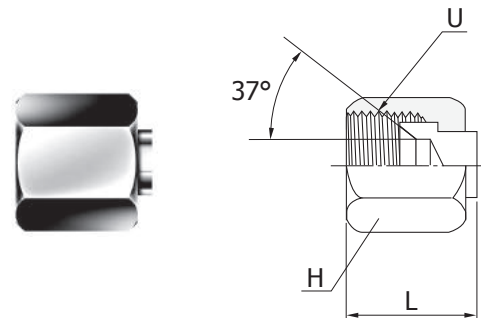
Cap for Tube End

### KC



Plug for Fitting Port

### KP



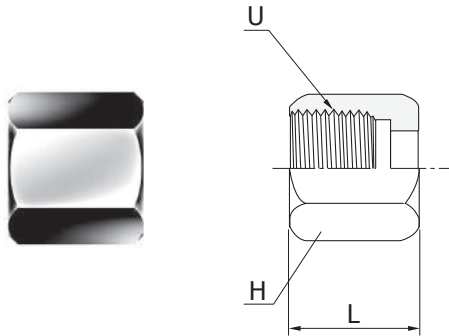
**Cap and Plug**

| Part No. | Tube O.D |        | U<br>(UNF) | H<br>(HEX) | L    |
|----------|----------|--------|------------|------------|------|
|          | Inch     | Metric |            |            |      |
| KC-2T    | 1/8"     | 3      | 5/16"-24   | 11.1       | 17.8 |
| KC-3T    | 3/16"    | 4      | 3/8"-24    | 11.1       | 18.5 |
| KC-4T    | 1/4"     | 6      | 7/16"-20   | 12.7       | 20.3 |
| KC-5T    | 5/16"    | 8      | 1/2"-20    | 14.2       | 20.3 |
| KC-6T    | 3/8"     | 10     | 9/16"-18   | 15.8       | 21.3 |
| KC-8T    | 1/2"     | 12     | 3/4"-16    | 20.6       | 23.9 |
| KC-10T   | 5/8"     | 16     | 7/8"-14    | 20.6       | 27.9 |
| KC-12T   | 3/4"     | 18, 20 | 1 1/16"-12 | 28.5       | 32.5 |
| KC-14T   | 7/8"     | 22     | 1 3/16"-12 | 31.7       | 33.3 |
| KC-16T   | 1"       | 25     | 1 5/16"-12 | 34.9       | 33.8 |
| KC-20T   | 1-1/4"   | 32     | 1 5/8"-12  | 42.8       | 36.8 |
| KC-24T   | 1-1/2"   | 38     | 1 7/8"-12  | 50.8       | 41.9 |
| KC-32T   | 2"       | 50     | 2 1/2"-12  | 66.6       | 52.1 |

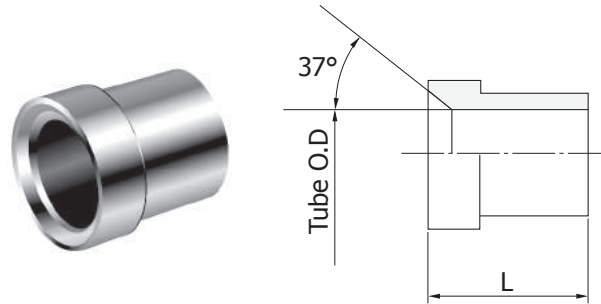
**Cap and Plug**

| Part No. | Tube O.D |        | U<br>(UNF) | H<br>(HEX) | L    |
|----------|----------|--------|------------|------------|------|
|          | Inch     | Metric |            |            |      |
| KP-2T    | 1/8"     | 3      | 5/16"-24   | 9.5        | 13.7 |
| KP-3T    | 3/16"    | 4      | 3/8"-24    | 11.1       | 15.2 |
| KP-4T    | 1/4"     | 6      | 7/16"-20   | 14.2       | 15.5 |
| KP-5T    | 5/16"    | 8      | 1/2"-20    | 15.8       | 17.0 |
| KP-6T    | 3/8"     | 10     | 9/16"-18   | 17.4       | 18.3 |
| KP-8T    | 1/2"     | 12     | 3/4"-16    | 22.2       | 21.3 |
| KP-10T   | 5/8"     | 16     | 7/8"-14    | 25.4       | 24.6 |
| KP-12T   | 3/4"     | 18, 20 | 1 1/16"-12 | 31.7       | 25.9 |
| KP-14T   | 7/8"     | 22     | 1 3/16"-12 | 34.9       | 27.4 |
| KP-16T   | 1"       | 25     | 1 5/16"-12 | 38.1       | 28.4 |
| KP-20T   | 1-1/4"   | 32     | 1 5/8"-12  | 50.8       | 31.0 |
| KP-24T   | 1-1/2"   | 38     | 1 7/8"-12  | 57.1       | 35.8 |
| KP-32T   | 2"       | 50     | 2 1/2"-12  | 73.0       | 44.2 |

Nut  
**KN**



Sleeve  
**KS**



**Spare Parts**

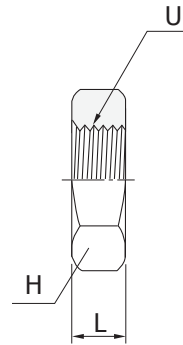
| Part No. | Tube O.D |        | U<br>(UNF) | H<br>(HEX) | L    |
|----------|----------|--------|------------|------------|------|
|          | Inch     | Metric |            |            |      |
| KN-2T    | 1/8"     | 3      | 5/16"-24   | 9.5        | 14.0 |
| KN-3T    | 3/16"    | 4      | 3/8"-24    | 11.1       | 15.5 |
| KN-4T    | 1/4"     | 6      | 7/16"-20   | 14.2       | 15.8 |
| KN-5T    | 5/16"    | 8      | 1/2"-20    | 15.8       | 17.3 |
| KN-6T    | 3/8"     | 10     | 9/16"-18   | 17.4       | 18.5 |
| KN-8T    | 1/2"     | 12     | 3/4"-16    | 22.2       | 21.6 |
| KN-10T   | 5/8"     | 16     | 7/8"-14    | 25.4       | 24.9 |
| KN-12T   | 3/4"     | 18, 20 | 1 1/16"-12 | 31.7       | 26.2 |
| KN-14T   | 7/8"     | 22     | 1 3/16"-12 | 34.9       | 27.7 |
| KN-16T   | 1"       | 25     | 1 5/16"-12 | 38.1       | 28.7 |
| KN-20T   | 1-1/4"   | 32     | 1 5/8"-12  | 50.8       | 31.2 |
| KN-24T   | 1-1/2"   | 38     | 1 7/8"-12  | 57.1       | 36.1 |
| KN-32T   | 2"       | 50     | 2 1/2"-12  | 73.0       | 44.5 |

**Spare Parts**

| Part No. | Tube O.D |        | L    |
|----------|----------|--------|------|
|          | Inch     | Metric |      |
| KS-2T    | 1/8"     | 3      | 8.6  |
| KS-3T    | 3/16"    | 4      | 8.6  |
| KS-4T    | 1/4"     | 6      | 10.4 |
| KS-5T    | 5/16"    | 8      | 11.2 |
| KS-6T    | 3/8"     | 10     | 12.7 |
| KS-8T    | 1/2"     | 12     | 14.2 |
| KS-10T   | 5/8"     | 16     | 16.8 |
| KS-12T   | 3/4"     | 18, 20 | 17.3 |
| KS-14T   | 7/8"     | 22     | 19.3 |
| KS-16T   | 1"       | 25     | 19.8 |
| KS-20T   | 1-1/4"   | 32     | 23.1 |
| KS-24T   | 1-1/2"   | 38     | 28.4 |
| KS-32T   | 2"       | 50     | 30.2 |

Bulkhead Lok Nut

**KBN**



**Spare Parts**

| Part No. | Tube O.D |        | U<br>(UNF) | L    | H<br>(HEX) |
|----------|----------|--------|------------|------|------------|
|          | Inch     | Metric |            |      |            |
| KBN-2T   | 1/8"     | 3      | 5/16"-24   | 5.6  | 14.2       |
| KBN-3T   | 3/16"    | 4      | 3/8"-24    | 5.6  | 15.8       |
| KBN-4T   | 1/4"     | 6      | 7/16"-20   | 6.4  | 17.4       |
| KBN-5T   | 5/16"    | 8      | 1/2"-20    | 6.4  | 19.0       |
| KBN-6T   | 3/8"     | 10     | 9/16"-18   | 6.9  | 20.6       |
| KBN-8T   | 1/2"     | 12     | 3/4"-16    | 7.9  | 25.4       |
| KBN-10T  | 5/8"     | 16     | 7/8"-14    | 9.1  | 28.5       |
| KBN-12T  | 3/4"     | 18, 20 | 1 1/16"-12 | 10.4 | 34.9       |
| KBN-14T  | 7/8"     | 22     | 1 3/16"-12 | 10.4 | 38.1       |
| KBN-16T  | 1"       | 25     | 1 5/16"-12 | 10.4 | 41.2       |
| KBN-20T  | 1-1/4"   | 32     | 1 5/8"-12  | 10.4 | 47.6       |
| KBN-24T  | 1-1/2"   | 38     | 1 7/8"-12  | 10.4 | 53.9       |
| KBN-32T  | 2"       | 50     | 2 1/2"-12  | 10.4 | 69.8       |



### Quality System Certifications

|                       |                       |
|-----------------------|-----------------------|
| ISO 9001:2000         | AP1149                |
| ISO 14001:2004        | CL-K-E-1149           |
| OHSMS 18001           | HSBSK-S006            |
| API Spec Q1           | 6D-0593               |
| KEPIC-MN              | MN-466                |
| PED 97/23/EC Module D | HSBI-10-11-046        |
| PED 97/23/EC Module H | HSBI-11-03-010        |
| PED 97/23/EC Annex I  | 07-202-1326WZ-0941/10 |

### Nuclear System and Product Certifications

|          |        |
|----------|--------|
| ASME N   | N-3185 |
| ASME NPT | N-3186 |
| ASME NS  | N-3342 |
| ASME NB  | N-3185 |

### Pressure Equipment Directive 97/23/EC

|            |                |
|------------|----------------|
| Module B&D | HSBI-10-11-045 |
|------------|----------------|

### DK-Lok Flange Adapter Leakproof Test per TA Luft requirements

|               |              |
|---------------|--------------|
| TUV Rheinland | 973-10014584 |
|---------------|--------------|

### CNG Certifications

|  |                                    |
|--|------------------------------------|
| TUV Rheinland : AF-2009-0903-01  | TUV SUD : 07-000026-PA-GMB-01      |
| ECE R110 67-01   | ECE Regulation NO. 110             |
| ISO 15500-19 15500-15916   | ECE Regulation NO. 67-02           |
| ANSI AGA NGV 3.1-1995,CGA NGV 12.3-M95   | Compressed Gaseous Hydrogen (CGH2) |
| ANSI AGA NGV 4.1-1999,CSA 125.M99  | Liquid Hydrogen(LH2)               |
| Draft ECE Compressed Gaseous Hydrogen Regulation,<br>Revision 12b, 10/12/03.<br>State of the art |                                    |

### CRN

|     |           |
|-----|-----------|
| CRN | 0A4788.2  |
| CRN | 0C07988.2 |
| CRN | 0C09275.2 |
| CRN | 0E07988.2 |
| CRN | 0C5191.2  |
| CRN | 0C07988.2 |

### GOST

|      |                     |
|------|---------------------|
| GOST | POCC KR.AB28.B02325 |
| GOST | POCC KR.AB28.B02327 |

### Type Approval Certifications

|     |  |
|-----|--|
| ABS | 01-BK218882/3-PDA<br>09-BK522012-PDA<br>BK720958-X       |
| BV  | 14034/A1 BV  |
| DNV | P-13044<br>P-13052                                       |
| GL  | 47 924-03HH<br>47 925-03HH<br>40 504-01HH<br>40 505-01HH |
| KR  | CWN80397-PE001   |
| LR  | 01/10047<br>01/10048                                     |
| NK  | 06FV101B   |

The information shown in this catalog are not for design purpose, but for reference only. The accuracy of information is not the liability of our company.

### Safe Component Selection

The Selection of component for any applications or system design must be considered to ensure safe performance. Component function, material compatibility, component ratings, proper installation, operation and maintenance remain the sole responsibility of the system designer and the user. DK Tech accepts no liability for any improper selection, installation, operation or maintenance.



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